State Fleet Efficiency and Alternative Fuel Program

Annual Report Fiscal Year 2001



Missouri Department of Natural Resources

Energy Center

DNR/EC-0402





Missouri State Fleet Efficiency and Alternative Fuels Program 2002

The Fuel Conservation for State Vehicles statute, Sections 414.400 - 414.417 RSMo, and the federal Energy Policy Act establish opportunities for Missouri state agencies to better manage transportation fuel consumption and promote the use of cleaner domestic alternative fuels.

All state agencies are obligated to report their progress annually to the Missouri Department of Natural Resources' Energy Center for the development of this annual report.

We are pleased to submit for your consideration this report on state fleet efficiency and alternative fuels use.

Sincerely,

ENERGY CENTER

Anita C. Randolph Director

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Executive Summary

Missouri's General Assembly passed Sections 414.400 - 414.417 RSMo in 1991 to set standards for economically and environmentally responsible state fleet management. The Missouri statute seeks to increase the average fuel efficiency of the state fleet and increase the use of cleaner domestic transportation fuels in state vehicles. Chapter 414 of the Missouri Revised Statutes can be found in Appendix A of this report.

Missouri Revised Statutes, Section 414.406, requires that the annual state fleet report include annual fuel consumption, number of vehicles, vehicle miles traveled, average fleet fuel economy, estimated cost savings and state use of alternative fuels. Summary tables containing aggregate data for the entire state fleet and all reporting agencies can be found in Appendix B of this report.

During the 2001 fiscal year, state agencies operated 13,196 vehicles. The number of vehicles subject to these statutes is 4,105. Throughout the report, these vehicles are referred to as eligible vehicles. The number of vehicles that fall into one of the exemptions allowed by law is 9,091. Vehicle miles traveled in eligible state vehicles were 44,157,448 miles, a decrease of less than 1 percent from the preceding fiscal year. Annual fuel consumption of all eligible state vehicles was 2,251,349 gasoline gallons equivalent (GGE), a decrease of less than 2 percent from the preceding fiscal year.

During the 2001 fiscal year, the average fleet fuel economy of eligible gasoline vehicles operated by state agencies was 23.8 mpg for passenger cars and 15.5 mpg for light trucks. Compared to the preceding fiscal year, the average fleet fuel economy increased 0.3 mpg for passenger cars and 0.1 mpg for light trucks.

Missouri Revised Statutes, Section 414.410, define the acquisition requirements for alternative fuel vehicles. State agencies with more than 15 eligible vehicles, between July 1, 2000 and July 1, 2002, are required to meet the statutory requirements. Alternative fuel vehicle (AFV) acquisitions must be 50 percent of all eligible vehicle acquisitions. During the first half of the statutory period, the AFV acquisition requirements were met or exceeded by eight agencies. The AFV acquisition requirements were not met by 12 state agencies, and 10 state agencies were not required to meet the AFV acquisition requirements.

State law sets an additional requirement for vehicles capable of using alternative fuels. By July 1, 2001, at least 30 percent of the fuel consumed in these vehicles must be alternative fuel. Actual alternative fuel use was 12 percent of total fuel consumption in alternative fuel vehicles, an increase of 2 percent from the 2000 fiscal year.

Legislation passed in 2001 (Section 414.407, RSMo), establishes an EPAct Credit Banking and Selling Program and charges the Department of Natural Resources with conducting a study on the use of alternative fuels in motor vehicles in the state. This study is included in Appendix E of this report.

Introduction

Missouri's General Assembly passed Sections 414.400 - 414.417 RSMo in 1991 to set standards for economically and environmentally responsible state fleet management. The Missouri statute seeks to increase the average fuel efficiency of the state fleet and increase the use of cleaner domestic transportation fuels in state vehicles. Chapter 414 of the Missouri Revised Statutes can be found in Appendix A of this report.

All state agencies are required to comply with the statute and are subject to one or both of the fleet-efficiency and alternative-fuel requirements. The statute covers light-duty vehicles, defined as those under 8,500 pounds gross vehicle weight rating (GVWR). The Department of Natural Resources is required to file an annual report on the Fuel Conservation for State Vehicles Program. The department has statutory authority to waive alternative fuel vehicle target acquisitions and the required percentage of alternative fuel use. The Office of Administration is required to ensure compliance with purchasing guidelines of alternative fuel vehicles and efficiency standards of conventional fuel vehicles.

The state legislation offers opportunities for state agencies to stretch operating budgets through greater fleet efficiency and to demonstrate technologies that reduce fuel consumption, manage travel efficiently and use cleaner domestic alternative fuels. It also offers opportunities for interagency communication and cooperation.

Based on statutory requirements¹, the following are the Fuel Conservation for State Vehicles objectives:

- 1. To achieve an efficient vehicle fleet. Legislation effective January 1, 1999, requires state agencies to meet minimum guidelines for efficient vehicle fleet management as established by the Department of Natural Resources.
- 2. To evaluate environmental and economic effects of using alternative transportation fuels. State government is to operate vehicles on alternative fuels such as 85 percent ethanol (E-85), propane, compressed natural gas (CNG) or others if the fuels are within the incremental lifecycle cost caps designated in the statute. Legislation effective January 1, 1999, establishes the maximum incremental life-cycle cost difference at 10 percent, except for vehicles to be used in clean-air maintenance and non-attainment areas of Kansas City and St. Louis, where the allowable incremental cost difference is 17 percent.

¹All agencies of Missouri state government are subject to the provisions of the program, with the exception of the departments of Transportation and Conservation, which may develop fleet management plans independently. Certain off-road vehicles, special use vehicles, law enforcement vehicles and vehicles for which no published U.S.

EPA CAFE standard exists are exempt from the provisions.

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- 3. *To increase the number of alternative fuel vehicles in state fleets*. Legislation effective January 1, 1999, mandates that any state agency operating a fleet of more than 15 motor vehicles must acquire vehicles capable of using alternative fuels as follows²:
 - At least 10 percent of the agency's fleet vehicles acquired between July 1, 1994, and July 1, 1996;
 - At least 30 percent of the agency's fleet vehicles acquired between July 1, 1996, and July 1, 1998; and
 - At least 50 percent of the agency's fleet vehicles acquired between July 1, 1998, and July 1, 2000, and each biennial period thereafter.

By July 1, 2001, at least 30 percent of the fuel used in state-owned AFVs must be an alternative fuel.

If a state agency exceeds any such biennial acquisition goal or has purchased vehicles capable of using alternative fuels before July l, 1994, such purchases may be credited to any future biennial acquisition goal.

Progress toward these requirements by individual agencies and in the aggregate is documented in annual reports submitted by the agencies to the Department of Natural Resources Energy Center following the end of the fiscal year. Summary tables showing the fleet operating data submitted by the individual agencies and in the aggregate can be found in Appendix B. The 2001 fiscal year ran from July 1, 2000 through June 30, 2001.

²The requirement may be waived for any state agency upon receipt of certification supported by acceptable evidence

[•] The agency's vehicles will be operating primarily in an area in which neither the agency nor a supplier has, or can reasonably be expected to have, a central refueling station for alternative fuels;

[•] The agency is unable to acquire or operate vehicles within the 10 and 17 percent cost limitations using life-cycle cost methods;

[•] The use of alternative fuels would not meet the energy conservation and exhaust emissions reduction criteria.

Missouri State Fleet Description

The Missouri state fleet includes all land motor vehicles operated by Missouri state agencies. The state's vehicle fleet is independently managed by each of the 30 reporting agencies. The reporting agencies include five executive agencies (Attorney General's Office, Secretary of State, State Auditor, State Treasurer and Office of Administration), 15 departmental agencies (Department of Agriculture, Department of Conservation, Department of Corrections, Department of Economic Development, Department of Elementary and Secondary Education, Department of Health, Department of Health, Department of Insurance, Department of Labor and Industrial Relations, Department of Mental Health, Department of Natural Resources, Department of Public Safety, Department of Revenue, Department of Social Services and Department of Transportation), and 10 higher education entities (Central Missouri State University, Harris-Stowe State College, Lincoln University, Missouri Southern State College, Missouri Western State University, Northwest Missouri State University, Southeast Missouri Missouri).

Missouri state fleet vehicles not included in this report are vehicles operated and maintained by the Missouri General Assembly, the State Lottery Commission, the State Tax Commission and other nonparticipating state commissions and boards.

Many of the vehicles operated by the Missouri state fleet are designated to duties that **exempt** these vehicles from fuel efficiency or alternative fuel requirements. Exempt vehicles also include vehicles that exceed 8,500 gross vehicle weight rating (GVWR). The requirements and exempt vehicle specifications are from the Missouri Revised Statutes, Sections 414.400 - 414.417. Exempt vehicle specifications are also covered in the Department of Natural Resources, State Vehicles Program Model Plan. As described in the model plan, vehicle-operating data is not presently reported on exempt vehicles.

Vehicle-operating data is collected on **eligible** vehicles. Eligible vehicles are vehicles subject to fuel efficiency requirements or alternative fuel requirements under the provisions of state law. The motor fuels used to fuel the eligible vehicles are gasoline, ethanol-85 (E-85), diesel (DSL), biodiesel (B20 – 20% biodiesel/80% diesel), liquid petroleum gas (LPG or propane), compressed natural gas (CNG) and electric. For this report, operating data on eligible vehicles is frequently summarized for passenger cars, light trucks, buses and other trucks. Passenger cars are vehicles classified as sedans or station wagons. Light trucks are vehicles classified as all other vehicle classifications except sedan, station wagon, bus or other truck.

Gasoline gallons equivalent (GGE) is the only measure of vehicle fuel volume used throughout this report. All alternative fuel quantities and conventional petroleum fuel quantities are reported in GGE. Reporting fuel usage in GGE is necessary because the Btu content of the different fuels varies considerably.

Shown in Figure 1, the total number of Missouri state fleet vehicles operated, during the 2001 fiscal year was 13,196 vehicles. Of all state fleet vehicles operated, the number of exempt vehicles included 9,091 vehicles (69 percent of all state fleet vehicles), while 4,105 vehicles (31 percent) were eligible to meet efficiency and alternative fuel requirements. Of all eligible vehicles operated by the state fleet, the number of gasoline vehicles included 3,250 vehicles (79 percent of all eligible vehicles), the number of alternative fuel vehicles included 816 vehicles (20 percent of all eligible vehicles), and the number of diesel vehicles included 39 vehicles (less than 1 percent of all eligible vehicles).

Table 1 shows the number and use of exempt vehicles for each designation are shown for 2001. Almost all state agencies operate vehicles that fit into at least one of the many exemption categories. Approximately a quarter of the agencies operate large enough fleets to exempt 300 or more vehicles.

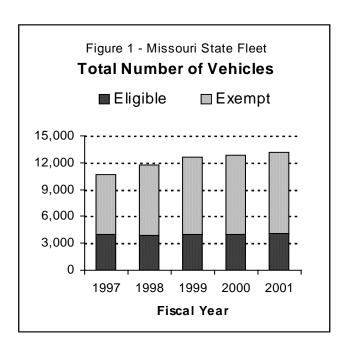


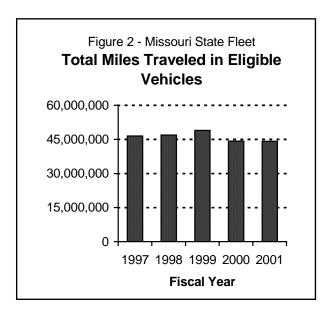
Table 1. Vehicle Designations of Exempt Vehicles (2001 Fiscal Year)

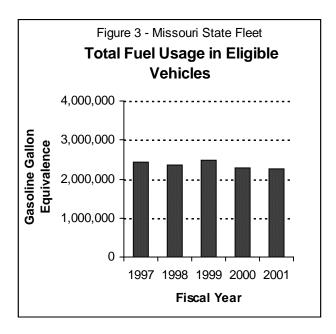
Designation	# of Vehicles
Over 8,500 GVWR	3,283
•	·
Law Enforcement	1,979
Construction	1,911
Off-Road	579
Hauls Maint. Equipment	411
Large Vans	409
Other Purpose	230
Used Hwy Patrol Vehicle	184
Road Maintenance	40
Hauls Trailers	21
Health/Fire Emergency	21
Hauls Construction Equip.	18
Motorcycle/ATV	5
Total	9,091

Shown in Figure 2, the total miles traveled by the eligible state vehicles were 44,157,448 miles throughout the 2001 fiscal year. Compared to the preceding year, the total miles traveled decreased by less than 1 percent.

The Missouri Revised Statutes, Section 414.406, requires that total fuel consumption be reported annually. Shown in Figure 3 is the annual fuel consumption of the eligible vehicles operated by the state fleet. (The annual fuel consumption of exempted vehicles is not included on the graph or in this report.) During 2001, fuel consumption of eligible state fleet vehicles decreased slightly less than the percent from the preceding year.

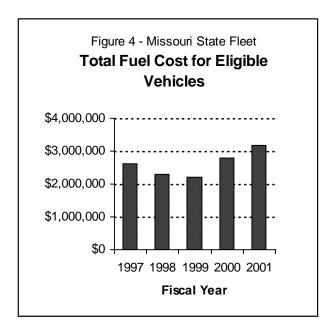
Gasoline consumption in eligible state fleet vehicles accounted for 95 percent of the total fuel consumption. Diesel fuel consumption accounted for 2 percent and alternative fuel consumption accounted for an additional 3 percent of the state fleet total. Compared to the preceding year, alternative fuel consumption in state AFVs has increased by 39 percent.





As shown in Figure 4, state agencies spent a total of \$3,180,091 to refuel eligible fleet vehicles during 2001. The total spent on gasoline was \$3,030,273 (95 percent of the total fuel cost). The total spent on alternative fuels was \$88,874 (3 percent of the total fuel cost), and the total spent on diesel fuel was \$60,944 (less than 2 percent of the total fuel cost).

Over the five-year period, the annual average price paid for gasoline by the state fleet has ranged from a low of \$0.91 per gallon during fiscal year 1999 to a high of \$1.42 per gallon during fiscal year 2001. Even with some reduction in total miles traveled during fiscal year 2001, the higher prices paid per gallon still pushed the total annual fuel cost to a five-year high. (Gasoline prices paid by the state fleet are often lower than retail prices because of special wholesale buying arrangements.)



During 2001, a total maintenance cost of \$1,573,625 was spent to repair eligible vehicles. Of all eligible vehicles, an annual maintenance cost of \$1,268,200 was spent to repair gasoline vehicles, \$245,887 to repair alternative fuel vehicles, and \$59,538 to repair diesel vehicles.

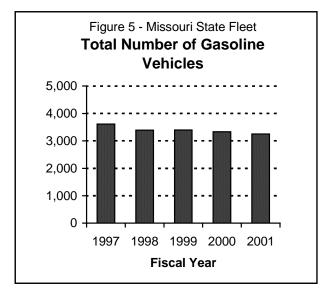
Fuel Efficiency of Gasoline Vehicles

The Missouri Revised Statutes, Section 414.400, specifies that each state agency is required to meet or exceed the Corporate Average Fuel Economy (CAFE) standard in its fleet. The CAFE standards apply to gasoline vehicles, diesel vehicles and alternative fuel vehicles. Compliance with the requirement is administered by the Office of Administration, Department of Transportation, Department of Conservation and higher education institutions.

To report the actual fuel efficiency performance of state fleet vehicles, eligible vehicles of less than 8,500 gross vehicle weight appear in this section of the report in two general categories of passenger cars and light trucks. Passenger cars are vehicles classified as sedans or station wagons. Light trucks are vehicles classified as all other vehicle classifications except sedan, station wagon, bus or other truck. The light truck category includes sport utility vehicles. These same vehicle designations are used in the summary tables found in Appendix B. (Additional fuel efficiency data on state fleet vehicles is also reported in the summary tables found in Appendix B.)

Throughout the next section of this report, state fleet data used to calculate vehicle fuel efficiency of gasoline vehicles are shown. Of all eligible vehicles operated by the Missouri State fleet throughout the 2001 fiscal year, 79 percent were gasoline vehicles. (Not required by state statutes and not shown in the report are the vehicle fuel efficiencies of AFVs or diesel vehicles.)

Shown in Figure 5, state agencies operated 3,250 vehicles. The number of passenger cars operated was 1,471 vehicles, 45 percent of the gasoline vehicles. The number of light trucks operated was 1,713 vehicles, 53 percent of the gasoline vehicles. The number of other trucks operated was 45 vehicles, less than 2 percent of the gasoline vehicles. The number of buses operated was 21 vehicles, less than 1 percent of the gasoline vehicles. Between the 1997 fiscal year and the 2001 fiscal year, the total number of gasoline vehicles decreased by 10 percent. The number of passenger cars decreased by 417 vehicles while the number of light trucks increased by 108 vehicles.



During 2001, the number of gasoline vehicles operated by individual state agencies ranged from agencies that claimed no gasoline vehicles to the University of Missouri's fleet of 723 gasoline vehicles. Most state agencies operated vehicle fleets of less than 200 gasoline vehicles. However, five agencies operated vehicle fleets with more than 200 gasoline vehicles, and three agencies operated vehicle fleets with more than 300 gasoline vehicles. The agencies that operated vehicle fleets with more than 300 gasoline vehicles

include the University of Missouri's fleet of 723 gasoline vehicles, the Department of Mental Health's fleet of 659 gasoline vehicles and the Department of Transportation's fleet of 324 gasoline vehicles.

Gasoline vehicles operated by the state fleet traveled a total of 32,398,125 miles during 2001. Between the 1997 fiscal year and the 2001 fiscal year, the total miles traveled in gasoline vehicles decreased by 10,158,192 miles, a decrease of 24 percent. The miles traveled in alternative fuel vehicles increased by 7,768,235 miles throughout the same period.

The total fuel consumption in gasoline vehicles was 1,716,662 gallons throughout 2001. Between the 1997 fiscal year and the 2001 fiscal year, total fuel consumption in gasoline vehicles decreased by 482,975 gallons, a decrease of 22 percent throughout the five-year period.

Shown in Figure 6, the fuel efficiency of gasoline vehicles is graphed for both passenger cars (labeled "cars" on the graph) and light trucks (labeled "trucks" on the graph). The average fuel efficiency of passenger cars operated by the state fleet during the 2001 fiscal year was 23.8 mpg, down by 0.2 percent from the 1997 fiscal year. The average fuel efficiency of light trucks operated by the state fleet during the 2001 fiscal year was 15.5 mpg, down by 0.1 percent from the 1997 fiscal year.

The following averages provide cost information on the normal operation of state fleet gasoline vehicles. The categories are very general. No attempt is made to distinguish between the uses, functions or types of vehicles operated by state agencies. Average operating costs are separated into

the cylinder groups of 4- and 6-cylinder passenger cars and 6- and 8-cylinder light trucks. The average operating costs include both fuel cost and maintenance cost. To adjust for the different number of vehicles within each cylinder group and to allow for comparison, the average operating cost are shown in cost per mile.

Between fiscal year 1997 and 2001, passenger cars with 4-cylinder engines achieved an average operating cost of \$0.07 per mile. Passenger cars with 6-cylinder engines achieved an average operating cost of \$0.08 per mile. Light trucks with 6-cylinder engines achieved an average operating cost of \$0.11 per mile. Light trucks with 8-cylinder engines achieved an average operating cost of \$0.16 per mile.

Alternative Fuel Vehicles

This section of the report contains operating data on alternative fuel vehicles that were owned or leased by the Missouri State fleet. The four types of alternative fuels used during 2001 were ethanol-85 (E-85), propane (liquid petroleum gas or LPG), compressed natural gas (CNG), biodiesel, and electricity. Most alternative fuel vehicles operated by the state fleet can be refueled with either gasoline or the designated alternative fuel.

Shown in Figure 7, the total number of alternative fuel vehicles operated by the state fleet has increased each year since the 1997 fiscal year. In 2001, the total number of alternative fuel vehicles operated was 816 vehicles, an increase of 445 vehicles since 1997.

The state fleet currently operates more ethanol-85 vehicles than any other type of alternative fuel vehicle. See Table 2 for detail.

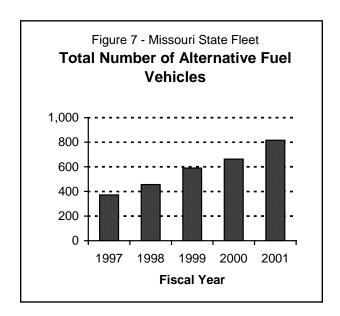


Table 2. Number of Alternative Fuel Vehicles
Operated by the Missouri State Fleet

Fuel Type	FY'97	FY'98	FY'99	FY'00	FY'01
Electric	0	0	0	0	1
Natural Gas (CNG)	60	47	48	32	30
Ethanol 85 (E85)	208	298	438	521	696
Propane (LPG)	103	111	105	110	89
Total	371	456	591	663	816

Shown in Table 3, alternative fuel vehicles are operated at state facilities at many different locations.

Table 3. Location of Alternative Fuel Vehicles
Operated by the Missouri State Fleet

	FY'97	FY'98	FY'99	FY'00	FY'01
Jefferson City	131	170	217	264	330
St. Louis	84	74	68	63	89
Kansas City	5	14	31	48	42
Springfield	12	15	14	21	42
Columbia	14	18	12	21	27
Other	125	165	249	246	286
Total	371	456	591	663	816

Missouri Revised Statutes, Section 414.410, defines the vehicle acquisition requirements of alternative fuel vehicles. Between July 1, 2000, and July 1, 2002, state agencies with more than 15 eligible vehicles are required to meet the statutory requirement that alternative fuel vehicle acquisitions must comprise 50 percent of all eligible vehicle acquisitions.

Agency acquisitions of alternative fuel vehicles are shown in the AFV summary tables located in Appendix B. As found by a simple count of the summary tables, 10 state agencies operated fewer than 15 eligible vehicles, eight agencies met or exceeded the alternative fuel vehicle acquisition requirement, and 12 agencies acquired fewer than the specified objective of 50 percent.

Statutes also specify goals for the actual use of alternative fuels. If alternative fuel vehicles are refueled with gasoline, the benefits achieved from refueling alternative fuel vehicles with the designated alternative fuels are lost.

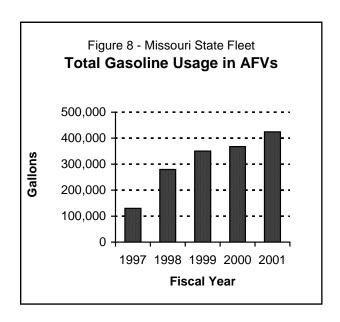
Most of the alternative fuel vehicles operated by the state fleet are capable of being fueled with a specific alternative fuel or gasoline. These multi-fuel vehicles are either dual-fuel vehicles (the two fuels are stored in separate fuel tanks in the vehicle) or flex-fuel vehicles (the two fuels are stored in the same fuel tank in the vehicle). Most of the fuel used in the state fleet AFVs throughout the 2001 fiscal year was gasoline.

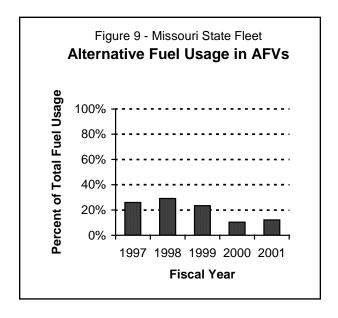
Shown in Figure 8, the total gasoline consumption in alternative fuel vehicles was 424,089 gallons, an increase of 15 percent from the preceding year. Total gasoline consumption in ethanol-85 vehicles was 371,677 gallons, total gasoline consumption in propane vehicles was 48,878 gallons, and total gasoline consumption in compressed natural gas vehicles was 3,533 gallons.

Missouri statutes specify alternative fuel usage requirements for alternative fuel vehicles. Shown in Figure 9, annual alternative fuel consumption is illustrated as a percent of total fuel consumption. The percent of alternative fuel used to refuel state AFVs was 12 percent of the total fuel consumption, an increase of 2 percent from the preceding year. Statutes mandate 30 percent use of alternative fuels.

Propane fuel is available at more refueling sites than any other alternative fuel offered in Missouri today. The total quantity of propane fuel consumption in state propane vehicles during the 2001 fiscal year was 16,094 GGE. Propane fuel consumption was 25 percent of all fuel used in propane vehicles.

The total quantity of compressed natural gas consumption in compressed natural gas state vehicles during the 2001 fiscal year was 15,460 GGE. Compressed natural gas consumption was 81 percent of all fuel used in state compressed natural gas vehicles.





Biodiesel is different from the other alternative fuels because the purchase of a special alternative fuel vehicle is not required. During fiscal year 2001, state agencies used 3,044 GGE of B20 to refuel state diesel vehicles. Total expenditures on B20 were \$3,675. The use of biodiesel is expected to increase considerably throughout the next fiscal year due to a U.S. Department of Energy rule (10CFR Part 490) effective February 12, 2001. This rule allows 450 gallons of biodiesel to qualify as the purchase of one AFV.

The renewable vehicle fuel E-85 is produced from processed plant material. During 2001, five privately owned refueling sites in Missouri sold E-85 fuel to the public. The total quantity of E-85 fuel consumption in state E-85 vehicles during 2001 was 24,064 GGE. E-85 fuel was 6 percent of all fuel used in E-85 vehicles.

Because of the limited number of E-85 refueling sites throughout Missouri, many E-85 vehicles were located at state facilities where refueling with E-85 was impractical or impossible. However, some agencies are able to coordinate the refueling of AFVs by locating vehicles at facilities close to refueling sites where the alternative fuels are available. Agencies are also able to install propane refueling equipment at the state facilities where LPG vehicles are located.

The following averages provide cost information on the operation of alternative fuel vehicles by state agencies. The categories are very general. Average operating costs are broken out for ethanol-85, propane and CNG vehicles. Average operating costs include both fuel cost and maintenance cost. To adjust for the different number of vehicles within each alternative fuel group and to allow for comparison, the average operating costs are shown in cost per mile.

Between fiscal year 1997 and 2001, ethanol-85 vehicles achieved an average operating cost of \$0.06 per mile, CNG vehicles achieved an average operating cost of \$0.08 per mile, and propane vehicles achieved an average operating cost of \$0.10 per mile.

The average operating costs are not yet available for electric vehicles. The Department of Natural Resources operated an electric vehicle during 2001; however, the vehicle was acquired late in the year. Therefore, only 3 miles of operations were logged for the vehicle during the entire reporting period.

Program Status

The Missouri Revised Statutes, Sections 414.410 - 414.417, establish guidelines for the current vehicle fuel efficiency and alternative fuel vehicles program partly administered by the Missouri Department of Natural Resources. The established program includes the writing and distribution of an annual state fleet report, vehicle fuel efficiency standards for new vehicle acquisitions, requirements for alternative fuel use in alternative fuel vehicles and purchasing requirements for the acquisition of alternative fuel vehicles.

Participating state agencies submitted annual operating data to DNR on agency vehicle operations and acquisitions made during 2001. Although the same reporting worksheets were provided to all agencies, most state agencies have developed different data tracking methods for the reporting of agency fleet operations and vehicle acquisitions data.

In recent years, most vehicle purchases have met CAFE standards, and the actual average fuel efficiency for cars and light trucks is expected to significantly increase in the coming years. During the 2001 fiscal year, most eligible vehicles operated by the state fleet were equipped to be refueled only with gasoline; 79 percent of all eligible state fleet vehicles are gasoline vehicles and therefore should have met the vehicle fuel efficiency standards when acquired by the agencies. Compliance with the purchasing requirements is administered by the Office of Administration, Department of Transportation, Department of Conservation and higher education institutions.

The numbers and types of alternative fuel vehicles currently available to state agencies and the public from manufacturers are steadily increasing. All major U.S. vehicle manufacturers are producing alternative fuel vehicles. The number of available alternative fuel stations also is slowly increasing. The Energy Center has published maps with the locations of the stations for alternative fuel vehicle drivers.

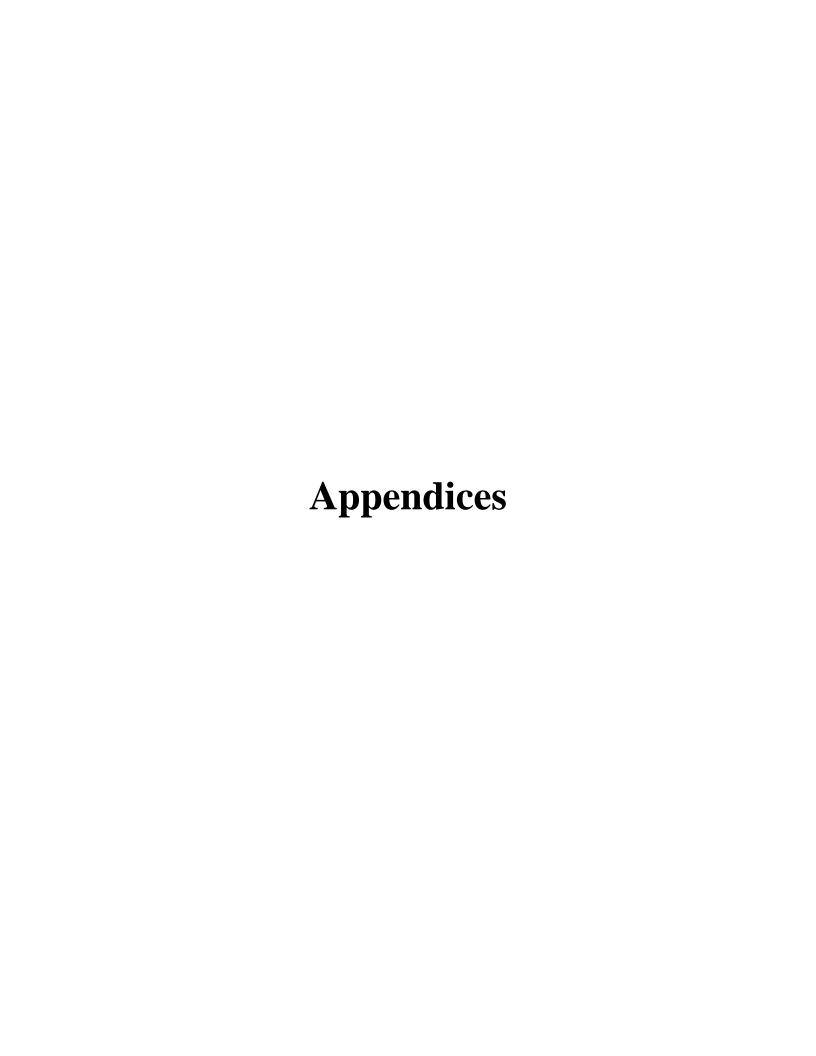
Many refueling stations throughout the state offer alternative fuels:

- Numerous propane-refueling sites are located throughout Missouri. The Missouri Propane Gas Association in Jefferson City publishes a directory of propane refueling locations.
- CNG site Shell station, I-44 and Hampton Ave., St. Louis, Mo.
- E-85 sites Claymont Auto Service, 15401 Clayton Road, Ballwin, Mo.; St. Louis Oil Company, Phillips 66, 2110 Chouteau Ave., St. Louis, Mo.; Presto, 649 Bannister Road, Kansas City, Mo.; Convenient Mart, 3714 W. Truman Blvd., Jefferson City, Mo.; and Convenient Mart, 701 Eastland Dr., Jefferson City, Mo. (The Missouri Department of Natural Resources' Energy Center worked with the Missouri Corngrowers Association to make the St. Louis and Jefferson City sites possible.)
- B20 site Convenient Mart, 3714 W. Truman Blvd., Jefferson City, Mo.

The Department of Natural Resources' Energy Center and industry representatives are working to encourage further use of alternative fuels in the appropriate AFVs. Colored labels for vehicle

packets are available from the Energy Center to identify AFVs and provide local directions to refueling facilities. The E-85 pumps at each gas station are more prominently labeled.

The Department of Natural Resources conducted a recognition program in 2000 to encourage the use of alternative fuels in the agency's state alternative fuel vehicles (AFVs). The agency's Energy Center selected five department employees each month from May through December 2000 for their outstanding efforts to locate and use these fuels. The winners were rewarded with a portfolio that proclaimed each of them as an *Energy Superstar*. This promotion helped increase department alternative fuel use by 18 percent. In particular, department E-85 use increased 180% from the preceding year.



Appendix A

Federal and Missouri Legislation: Comparison of Key Alternative Fuel Provisions

Missouri Statute RSMo 414.400 - 414.417

Federal and Missouri Alternative Fuel Acts: Comparison of Key Provisions

Clean Air Act	Energy Policy Act	Missouri Sections 414.400 - 417 RSMo, 1999						
Applicability								
Twenty-two metropolitan areas with populations of 250,000 or more (1980 census) with either serious, severe or extreme ozone or carbon monoxide areas.	Metropolitan areas with a 1980 population of 250,000 or more.	All state-owned vehicles throughout the state.						
Fleets Subject to Act								
Fleets of ten or more vehicles that are centrally fueled or capable of being centrally fueled.	Fleets with at least 20 vehicles that are centrally fueled or capable of being centrally fueled in a metropolitan area; however, this requirement applies only if a fleet also has at least 50 vehicles within the United States.	State-owned fleets with more than 15 vehicles.						
Exemptions								
Vehicles that are garaged at a personal residence overnight are to be considered <u>not</u> capable of central fueling.	Private fleet vehicles that are garaged at home overnight are exempted.	Off-road vehicles, maintenance and construction vehicles and transport trailers.						
Law enforcement vehicles.	Law enforcement vehicles. The Secretary of Energy may terminate this exemption.	Law enforcement vehicles.						
Emergency vehicles.	Emergency vehicles.	Emergency vehicles.						
Fuels								
Any fuel that meets the emission standard may be used, including reformulated gasoline, clean diesel, ethanol, methanol, propane, electricity and natural gas.	Alternative fuels include methanol, ethanol, natural gas, propane, biodiesel, and electricity. Reformulated gasoline is not considered to be an alternative fuel.	Alternative fuels include 85 percent methanol, 85 percent ethanol, natural gas, propane, 20 percent biodiesel, hydrogen and electricity. Reformulated gasoline is not considered to be an alternative fuel.						

Clean Air Act	Clean Air Act Energy Policy Act	
Weight Limits		
Includes automobiles and trucks up to 26,000 pounds gross vehicle weight.	Includes vehicles with a gross vehicle weight of less than or equal to 8,500 pounds.	For reporting purposes, state agencies are including only those eligible vehicles less than or equal to 8,500 pounds (GVWR).
Purchase Dates		
Beginning with model year 1998.	Federal fleet – 1993 State fleets - model year 1996. Private and municipal fleets - model year 1999 or later (subject to ruling by the Secretary of Energy that a private/municipal fleet program is needed.) Fuel provider fleets - model year 1996.	Acquire vehicles capable of using alternative fuels: 10 percent by July 1, 1996 30 percent by July 1, 1998 50 percent by July 1, 2000 By July 1, 2002, 30% of fuel used in AFVs must be an alternative fuel.
There are no exemptions provided in the law in the event vehicles or fuel are not available.	The Secretary of Energy must exempt a fleet if vehicles or fuels are not available.	The Missouri DNR director may reduce any percentage specified or waive requirements upon receipt of certification supported by evidence to the director that: 1) Fuels are not available; 2) Fuels do not meet cost limitations; or 3) Fuels do not meet energy conservation or emissions criteria.

Missouri Revised Statutes Chapter 414 Fuel Regulation and Conservation

Fuel Regulation and Conservation Section 414.400

August 28, 1999

Definitions--program for state fuel consumption reduction, fleet management and promotion of alternative fuels, University of Missouri, included duties--exceptions for certain vehicles.

414.400. 1. As used in sections 414.400 to 414.417, the following terms mean:

- (1) "Alternative fuel", any fuel, including any alcohol fuel containing eighty-five percent or more by volume of such alcohol or other such percentage not less than seventy percent if determined by the United States Department of Energy by rule to be necessary to provide for the requirements of cold start, safety, or vehicle functions, natural gas, liquefied petroleum gas, any fuel other than alcohol derived from biological materials when designated by the United States Department of Energy as an alternative fuel, and hydrogen, or any power source, including electricity, and any other fuel that the United States Department of Energy determines by final rule is substantially not petroleum and would yield substantial energy security and environmental benefits, used in a vehicle that complies with the standards and requirements applicable to such vehicle pursuant to sections 414.400 to 414.417 when using such fuel or power source;
- (2) "CAFE standard", the federal Corporate Average Fuel Economy standard, 15 U.S.C. 2002 or 40 CFR Parts 86 and 600 or 49 CFR Part 538 or proposed rule 49 CFR Part 538 until such rule is finalized:
- (3) "Department", the department of natural resources;
- (4) "Director", the director of the department of natural resources;
- (5) "State agency", the same meaning as such term is defined in section 536.010, RSMo;
- (6) "Vehicle fleet", any fleet comprised of vehicles with a manufacturer's gross vehicle weight rating of not more than eight thousand five hundred pounds registered for operation on the highways of this state pursuant to chapter 301, RSMo.
- 2. The department in consultation with the commissioner of administration shall develop and implement a program to manage and progressively reduce state agency vehicle fleet fuel consumption and promote the use of alternative fuels. The program shall require state agencies to meet minimum guidelines for efficient fleet management. Such guidelines shall be updated and revised every two years and shall require the overall vehicle fleet fuel efficiency for each agency to meet or exceed the fuel efficiency that would be achieved if each vehicle in the agency's fleet met the CAFE standard. The department may promulgate rules necessary to implement such guidelines. Further, provided that suppliers or state agencies have or can reasonably be expected to have established alternative fuel refueling stations as needed, the program shall require that at least thirty percent of all motor fuel purchased annually for use in alternative fuel vehicles, calculated in gasoline gallon equivalents, to be alternative fuel by July 1, 2001. Any alternative fuel purchased by a state agency for use in vehicles not included in their vehicle fleet as defined in subsection 1 of this section, calculated in gasoline gallon equivalents, may be credited toward the annual alternative fuel purchase goal. The program shall systematically replace existing state-owned vehicles and vehicles paid for with any state money,

including vehicles purchased by the university system, with vehicles manufactured, assembled or produced in the United States, as required by sections 34.350 to 34.359, RSMo.

- 3. The commissioner of administration shall identify specific vehicle models within each vehicle procurement class that meet or exceed the CAFE standard. State agencies shall identify specific vehicle models within each vehicle procurement class that have a life cycle cost which is less than or equal to the average life cycle cost of those vehicles in the class which are manufactured, assembled or produced in the United States. Life cycle costs shall include but are not limited to the original cost of the vehicle, conversion cost if applicable, costs associated with vehicle emissions to the extent that such statistics are available, and projected cost of operation, including fuel cost and maintenance and salvage value to the extent that reliable maintenance and salvage value statistics are available. Unless a state agency submits to the department a fleet efficiency plan that complies with the minimum guidelines for energy efficiency established pursuant to subsection 2 of this section, or unless otherwise approved by the office of administration pursuant to subsection 4 of this section, all purchases of vehicles for state agency vehicle fleets shall meet the above standards.
- 4. The commissioner of administration may waive the CAFE standard requirements of subsection 3 of this section, for only those vehicles which satisfy one or more of the following conditions, for any state agency upon receipt of documentation that has been certified by the director of the state agency as satisfying one or more of the following conditions:
- (1) Such vehicles are used primarily in off-road, construction, or road maintenance applications;
- (2) Such vehicles are regularly used in the movement of maintenance or construction equipment;
- (3) Such vehicles are trucks or utility vehicles as defined by the office of administration that are regularly used to transport trailers for the purpose of moving state equipment; or
- (4) Such vehicles are vehicles with manufacturer-stated seating capacity exceeding that for six persons and the director of the agency has certified that the vehicle will be used to transport its rated capacity in persons and/or cargo. Agencies which are granted such waivers shall comply with the planning requirements of section 414.403.
- 5. The purchase of all class III vehicles, as defined by the office of administration, shall be approved through the appropriations process for all departments except the highway patrol. The provisions of this subsection shall not apply to the purchase of used vehicles from the highway patrol.

(L. 1991 H.B. 45 § 1, A.L. 1998 S.B. 619)

Effective 1-1-99

Chapter 414 Fuel Regulation and Conservation Section 414.403

August 28, 1996

Vehicle fleet energy conservation plan to be developed by each state agency, purpose of plan, content--plan to be submitted to department of natural resources, when.

- 414.403. 1. Each state agency, with assistance from the department of natural resources, shall develop and implement a vehicle fleet energy conservation plan for the purposes of reducing vehicle fuel consumption. Plans shall be submitted to the director of the department of natural resources by January 1, 1993. Such plans shall include:
- (1) A timetable by which fleet vehicles shall be replaced with vehicles which exceed the average fuel economy for their vehicle class as outlined in section 414.400;
- (2) Options for the use of demonstrated innovative technologies that promote energy conservation and reduced fuel consumption;
- (3) Methods that promote efficient trip planning and state vehicle use; and
- (4) Car-pooling and van pooling for agency employees for commuting and job-related travel.
- 2. The department of conservation and the department of highways and transportation may develop their own vehicle fleet energy conservation plan. Such plans shall meet the objectives of sections 414.400 to 414.417 and shall comply with the reporting requirements of sections 414.400 to 414.417.

(L. 1991 H.B. 45 § 2)

Chapter 414 Fuel Regulation and Conservation Section 414.406

Vehicle fleet plan reviewed--office of administration to purchase only vehicles conforming to plan--annual report, content.

- 414.406. 1. The director of the department of natural resources shall review each agency's vehicle fleet plan and the vehicular demands of the agency by vehicle class. The office of administration shall only purchase for an agency those vehicles which conform to the agency's plan as outlined in sections 414.400 and 414.403.
- 2. Each state agency shall annually file a report with the director of the department of natural resources on forms provided by the department showing its progress in achieving the requirements and goals of sections 414.400 to 414.417. The director of the department of natural resources shall compile such information into an annual report and submit such report to the commissioner of administration, the secretary of the senate, the clerk of the house of representatives and the chairman of each committee of jurisdiction of the general assembly.
- 3. The director's report shall document progress in achieving the requirements and goals of sections 414.400 to 414.417 and shall include, but not be limited to, annual fuel consumption,

number of vehicles, vehicle miles traveled, average fleet fuel economy, estimated cost savings and state use of alternative fuels.

(L. 1991 H.B. 45 § 3)

Chapter 414 Fuel Regulation and Conservation Section 414.410

Motor vehicle alternative fuel use plan to be developed by department of natural resources-powers and duties--state agency fleets of fifteen or more vehicles, time table for using alternative fuels.

- 414.410. 1. The director shall develop a motor vehicle alternative fuel use plan. The director shall cooperate with state agency fleet operators, vehicle manufacturers and converters, fuel distributors and others to identify the types of vehicles which could be converted to alternative fuels. The director shall consider range, specialty uses, fuel availability, vehicle cost, vehicle manufacturing and conversion capability, safety, resale values, and other relevant factors.
- 2. The department shall recommend alternative fuels which state agencies and state universities may consider when purchasing vehicles. The department shall consider the content of vehicle exhaust emissions, the relative efficiency of the fuel, the relative efficiency of the processes required to produce the fuel and the characteristics of air emissions associated with the production of that fuel. It shall recommend for state use those alternative fuels which best satisfy the goals of energy conservation and emissions reduction.
- 3. Any state agency which operates a fleet of more than fifteen motor vehicles shall acquire vehicles capable of using alternative fuels as follows:
- (1) At least ten percent of the agency's fleet vehicles acquired between July 1, 1994, and July 1, 1996:
- (2) At least thirty percent of the agency's fleet vehicles acquired between July 1, 1996, and July 1, 1998; and
- (3) At least fifty percent of the agency's fleet vehicles acquired between July 1, 1998, and July 1, 2000, and each biennial period thereafter.

If a state agency exceeds any such biennial acquisition goal, or has purchased vehicles capable of using alternative fuels before July I, 1994, such purchases may be credited to any future biennial acquisition goal. If a state agency has purchased vehicles capable of using alternative fuels but not included in their vehicle fleet as defined in subsection 1 of section 414.400, such purchases may be credited toward any biennial acquisition goal. If a state agency fails to meet a biennial acquisition goal, the commissioner of administration shall not authorize for such agency the purchase of any vehicle not capable of using alternative fuels until such acquisition goal is met, unless the director has reduced or waived the acquisition goal pursuant to subsection 1 of section 414.412.

(L. 1991 H.B. 45 § 4 subsecs. 1, 2, 3, A.L. 1998 S.B. 619)

Effective 1-1-99

Chapter 414 Fuel Regulation and Conservation Section 414.412

Alternative use of fuel, waived or percentage reduced by director of natural resources, certified evidence required--other vehicles, ethanol use required, exceptions.

- 414.412. 1. The director may reduce any percentage specified or waive the requirement of subsection 3 of section 414.410 for any state agency upon receipt of certification supported by evidence acceptable to the director that:
- (1) The agency's vehicles will be operating primarily in an area in which neither the agency nor a supplier has or can reasonably be expected to have a central refueling station for alternative fuels; or
- (2) The agency is unable to acquire or operate vehicles within the cost limitations of section 414.400 or section 414.415; or
- (3) The use of alternative fuels would not meet the energy conservation and exhaust emissions reduction criteria of subsection 2 of section 414.410.
- 2. State agencies shall submit information describing the acquisition and use of vehicles capable of using alternative fuels to the department in a format prescribed by the department. The report shall include for each vehicle model capable of using alternative fuel:
- (1) The types of alternative fuels used;
- (2) The number of miles traveled using alternative fuels and the ratios to the total numbers of miles traveled;
- (3) The number of vehicles owned which are capable of using alternative fuels;
- (4) Maintenance costs.
- 3. Each state-owned vehicle equipped to operate on gasoline, other than vehicles using alternative fuel, shall use a fuel ethanol blend as defined in section 142.027, RSMo, when available at a competitive price, as its motor fuel, unless the United States Environmental Protection Agency, or the governor by executive order, promulgates rules which prohibit, limit or otherwise regulate the use of ethanol-blended fuels in ozone nonattainment areas, as defined by Section 107 of the federal Clean Air Act, as amended, or in an* area designated as a maintenance area for ozone under Section 175A of the federal Clean Air Act, as amended, state-owned vehicles shall not be required to use a fuel ethanol blend.

(L. 1991 H.B. 45 § 4 subsecs. 4, 5, 6, A.L. 1993 H.B. 611, A.L. 1998 S.B. 619)

Effective 1-1-99

Chapter 414 Fuel Regulation and Conservation Section 414.415

Percentage requirements, how state agencies to comply.

414.415. State agencies may meet the percentage requirements of sections 414.410 to 414.415 through purchase of original equipment manufactured alternative fuel vehicles or the conversion of vehicles, in accordance with federal and state requirements and applicable safety laws. Vehicles purchased pursuant to sections 414.410 to 414.415 shall not exceed the cost of conventional fuel vehicles of the same make and model by more than ten percent, using life cycle costing methods calculated pursuant to criteria in subsection 3 of section 414.400, except that vehicles purchased pursuant to sections 414.410 to 414.415 that are based for the life of the vehicle and used primarily in maintenance and nonattainment areas defined with regard to the National Ambient Air Quality Standards of the federal Clean Air Act, as amended, 42 U.S.C. 7401 et seq., shall not exceed such cost of conventional fuel vehicles of the same make and model by more than seventeen percent. The commissioner of administration in purchasing, leasing, maintaining or converting vehicles for alternative fuels use shall comply with all applicable safety standards promulgated by the United States Department of Transportation.

(L. 1991 H.B. 45 § 4 subsec. 7, A.L. 1998 S.B. 619)

Effective 1-1-99

Chapter 414 Fuel Regulation and Conservation Section 414.417

Criminal law enforcement vehicles and certain other vehicles, law not applicabledemonstration vehicles for alternative fuels authorized.

- 414.417. 1. Sections 414.400 to 414.417 shall not apply to the purchase or lease of a vehicle to be used primarily for criminal law enforcement or to the purchase or lease of a motorcycle, all-terrain vehicle, ambulance, or any type of vehicle for which the Environmental Protection Agency has not published fuel economy comparisons.
- 2. Notwithstanding the provisions of sections 414.400 to 414.417, the department of natural resources may acquire vehicles which use alternative fuels for the purposes of assessing and demonstrating either or both alternative vehicles and alternative fuels.

(L. 1991 H.B. 45 § 5)

Appendix B

State Fleet Summary Tables and Fleet Data by State Agency

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CFV Summary TableSummary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

	Fiscal Year				
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001
Number of Vehicles - Gasoline Vehicles	3,612	3,392	3,399	3,337	3,250
Miles Traveled - Gasoline Vehicles	42,556,317	38,480,769	38,550,312	34,162,757	32,398,125
Gas Use (gallons) - Gasoline Vehicles	2,199,637	1,912,581	1,976,282	1,834,373	1,716,662
Gasoline Cost - Gasoline Vehicles	\$2,380,692	\$1,907,368	\$1,800,172	\$2,245,862	\$2,435,126
Gasoline Cost per Gallon	\$1.08	\$1.00	\$0.91	\$1.22	\$1.42
Maintenance Cost - Gasoline Vehicles	\$2,210,341	\$1,428,856	\$1,432,831	\$1,504,709	\$1,268,200
Maint. Cost per Mile - Gasoline Vehicles	\$0.052	\$0.037	\$0.037	\$0.044	\$0.039
Number of Vehicles - Passenger Cars	1,888	1,740	1,582	1,548	1,471
Miles Traveled - Passenger Cars	26,673,197	21,976,108	20,633,877	18,337,028	17,233,598
Miles Traveled per Passenger Car	14,128	12,630	13,043	11,846	11,716
Gas Use (gallons) - Passenger Cars	1,110,709	877,682	841,737	780,309	724,839
Miles per Gallon - Passenger Cars	24.0	25.0	24.5	23.5	23.8
Gasoline Cost - Passenger Cars	\$1,204,270	\$867,543	\$736,097	\$949,233	\$1,025,016
Maintenance Cost - Passenger Cars	\$1,182,306	\$660,486	\$578,557	\$532,903	\$486,229
Maint. Cost per Mile - Passenger Cars	\$0.044	\$0.030	\$0.028	\$0.029	\$0.028
Number of Vehicles - Light Trucks	1,605	1,565	1,722	1,680	1,713
Miles Traveled - Light Trucks	15,241,411	16,046,748	17,481,943	15,154,735	14,606,165
Miles Traveled per Light Truck	9,496	10,254	10,152	9,021	8,527
Gas Use (gallons) - Light Trucks	977,347	980,055	1,081,489	986,454	943,259
Miles per Gallon - Light Trucks	15.6	16.4	16.2	15.4	15.5
Gasoline Cost - Light Trucks	\$1,049,859	\$983,820	\$1,011,268	\$1,213,041	\$1,341,582
Maintenance Cost - Light Trucks	\$917,737	\$695,502	\$751,724	\$879,353	\$722,783
Maint. Cost per Mile - Light Trucks	\$0.060	\$0.043	\$0.043	\$0.058	\$0.049
Number of Vehicles - Diesel Vehicles	42	32	41	40	39
Miles Traveled - Diesel Vehicles	353,088	283,914	392,473	348,572	371,521
Miles Traveled per Diesel Vehicle	8,407	8,872	9,573	8,714	9,526
Diesel Fuel Use (GGE) - Diesel Vehicles	54,125	42,940	54,055	49,616	51,856
Diesel Fuel Cost - Diesel Vehicles	\$50,591	\$32,711	\$40,510	\$49,128	\$60,944
B20 Fuel Use (GGE) - Diesel Vehicles	3,360	3,920	0	0	3,044
B20 Fuel Cost - Diesel Vehicles	\$13,500	\$3,100	0	0	\$3,675
Maintenance Cost - Diesel Vehicles	\$69,344	\$33,259	\$91,427	\$37,949	\$59,538
Maint. Cost per Mile - Diesel Vehicles	\$0.196	\$0.117	\$0.233	\$0.109	\$0.160
Number of Gasoline Buses	61	31	28	23	21
Number of Gasoline Truck Others	58	56	67	86	45
Number of Exempted Vehicles	6,690	7,933	8,598	8,855	9,091
CFV Acquisitions - Only New CFVs		276	266	260	176
CFVs, AFVs and Exempted Vehicles	10,715	11,813	12,629	12,895	13,196

CFV Summary Table of Cylinder GroupsSummary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

	Fiscal Year				
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001
Number of Vehicles - 4_Cylinder Cars	241	572	523	465	412
Miles Traveled - 4_Cylinder Cars	3,332,252	6,962,192	6,539,088	5,202,645	4,269,263
Miles Traveled per 4_Cylinder Car	13,827	12,172	12,503	11,188	10,362
Gas Use (gallons) - 4_Cylinder Cars	120,022	249,678	239,142	200,400	159,489
Miles per Gallon - 4_Cylinder Cars	27.8	27.9	27.3	26.0	26.8
Gasoline Cost - 4_Cylinder Cars	\$133,373	\$257,330	\$221,378	\$248,257	\$224,568
Maintenance Cost - 4_Cylinder Cars	\$79,343	\$202,105	\$194,559	\$165,225	\$147,643
Maint. Cost per Mile - 4_Cylinder Cars	\$0.024	\$0.029	\$0.030	\$0.032	\$0.035
Number of Vehicles - 6_Cylinder Cars	123	839	786	728	742
Miles Traveled - 6_Cylinder Cars	1,553,052	10,684,357	10,398,653	8,951,735	9,278,968
Miles Traveled per 6_Cylinder Car	12,626	12,735	13,230	12,296	12,505
Gas Use (gallons) - 6_Cylinder Cars	62,064	425,259	430,537	383,170	392,015
Miles per Gallon - 6_Cylinder Cars	25.0	25.1	24.2	23.4	23.7
Gasoline Cost - 6_Cylinder Cars	\$72,091	\$401,257	\$362,119	\$468,757	\$560,429
Maintenance Cost - 6_Cylinder Cars	\$42,748	\$321,957	\$282,947	\$276,801	\$259,147
Maint. Cost per Mile - 6_Cylinder Cars	\$0.028	\$0.030	\$0.027	\$0.031	\$0.028
Number of Vehicles - 6_Cylinder Trucks	282	877	902	1,205	984
Miles Traveled - 6_Cylinder Trucks	3,741,707	9,967,342	9,950,671	9,604,694	9,041,389
Miles Traveled per 6_Cylinder Truck	13,268	11,365	11,032	7,971	9,188
Gas Use (gallons) - 6_Cylinder Trucks	201,225	535,949	540,456	547,521	497,841
Miles per Gallon - 6_Cylinder Trucks	18.6	18.6	18.4	17.5	18.2
Gasoline Cost - 6_Cylinder Trucks	\$219,169	\$536,982	\$499,038	\$670,524	\$714,559
Maintenance Cost - 6_Cylinder Trucks	\$192,005	\$388,924	\$412,964	\$500,100	\$400,740
Maint. Cost per Mile - 6_Cylinder Trucks	\$0.051	\$0.039	\$0.042	\$0.052	\$0.044
Number of Vehicles - 8_Cylinder Trucks	352	618	703	578	615
Miles Traveled - 8_Cylinder Trucks	3,317,747	5,621,154	6,618,475	4,668,585	4,432,495
Miles Traveled per 8_Cylinder Truck	9,425	9,096	9,415	8,077	7,207
Gas Use (gallons) - 8_Cylinder Trucks	244,254	413,262	486,159	383,421	384,259
Miles per Gallon - 8_Cylinder Trucks	13.6	13.6	13.6	12.2	11.5
Gasoline Cost - 8_Cylinder Trucks	\$280,053	\$415,780	\$461,814	\$475,654	\$540,628
Maintenance Cost - 8_Cylinder Trucks	\$317,414	\$270,009	\$306,424	\$358,685	\$297,065
Maint. Cost per Mile - 8_Cylinder Trucks	\$0.096	\$0.048	\$0.046	\$0.077	\$0.067

Note: The number of cars and trucks reported within the above cylinder groups may be different than the total number of cars and trucks reported on other tables. To maximize the accuracy of calculated averages only complete record sets, data without estimated values, were used to construct this summary table. Record sets were also omitted if cylinder groups were combined within a record set.

AFV Summary Table
Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

	Fiscal Year					
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001*	
Number of Vehicles - AFVs	371	456	591	663	816	
Miles Traveled - AFVs	3,619,567	8,130,195	10,016,000	9,674,664	11,387,802	
Gas Fuel Use (gallons) - AFVs	129,861	279,457	350,313	367,421	424,089	
Alt. Fuel Use (GGE) - AFVs	42,183	110,496	106,820	42,258	55,698	
Percent Alt. Fuel Use in AFVs	25%	28%	23%	10%	12%	
Alt. Fuel Cost - AFVs	\$46,030	\$96,541	\$81,857	\$49,450	\$88,874	
Maintenance Cost - AFVs	\$107,541	\$174,556	\$222,919	\$204,318	\$245,887	
AFV Acquisitions - Only New AFVs		88	219	160	140	
Percent AFVs of New Acquisitions		24%	45%	38%	44%	
Number of Vehicles - CNG Vehicles	60	47	48	32	30	
Miles Traveled - CNG Vehicles	829,569	771,176	1,310,063	419,761	325,155	
Miles Traveled per CNG Vehicle	13,826	16,408	27,293	13,118	10,839	
Gas Fuel Use (gallons) - CNG Vehicles	18,240	32,865	51,357	10,560	3,533	
CNG Fuel Use (GGE) - CNG Vehicles	23,869	13,776	31,830	7,507	15,460	
CNG Fuel Cost - CNG Vehicles	\$9,514	\$4,550	\$13,356	\$4,403	\$10,469	
CNG Fuel Cost per GGE	\$0.40	\$0.33	\$0.42	\$0.59	\$0.68	
Maintenance Cost - CNG Vehicles	\$55,064	\$35,164	\$47,790	\$17,974	\$10,661	
Maint. Cost per Mile - CNG Vehicles	\$0.0664	\$0.0456	\$0.0365	\$0.0428	\$0.0328	
Number of Vehicles - E85 Vehicles	208	298	438	521	696	
Miles Traveled - E85 Vehicles	1,580,524	5,201,452	7,150,217	7,984,832	9,988,741	
Miles Traveled per E85 Vehicle	7,599	17,455	16,325	15,326	14,352	
Gas Fuel Use (gallons) - E85 Vehicles	57,725	187,672	253,059	300,887	371,677	
E85 Fuel Use (GGE) - E85 Vehicles	3,433	9,551	16,870	13,860	24,064	
E85 Fuel Cost - E85 Vehicles	\$5,743	\$17,041	\$22,620	\$26,474	\$50,454	
E85 Fuel Cost per GGE	\$1.67	\$1.78	\$1.34	\$1.91	\$2.10	
Maintenance Cost - E85 Vehicles	\$26,943	\$75,018	\$108,227	\$130,033	\$205,678	
Maint. Cost per Mile - E85 Vehicles	\$0.0170	\$0.0144	\$0.0151	\$0.0163	\$0.0206	
Number of Vehicles - LPG Vehicles	103	111	105	110	89	
Miles Traveled - LPG Vehicles	1,209,474	2,157,567	1,555,720	1,270,071	1,073,903	
Miles Traveled per LPG Vehicle	11,742	19,438	14,816	11,546	12,066	
Gas Fuel Use (gallons) - LPG Vehicles	53,896	58,920	45,897	55,974	48,878	
LPG Fuel Use (GGE) - LPG Vehicles	14,881	87,169	58,121	20,891	16,094	
LPG Fuel Cost - LPG Vehicles	\$17,273	\$71,849	\$45,880	\$18,573	\$24,087	
LPG Fuel Cost per GGE	\$1.16	\$0.82	\$0.79	\$0.89	\$1.50	
Maintenance Cost - LPG Vehicles	\$25,534	\$64,374	\$66,902	\$56,311	\$29,548	
Maint. Cost per Mile - LPG Vehicles	\$0.0211	\$0.0298	\$0.0430	\$0.0443	\$0.0275	

^{*}Also included in the AFV totals are data from an electric vehicle.

CFV Summary TableSummary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

	agencies. Estimates (est) are provided when the actual data is unavailable / inconsisten Fiscal Year					
Conventional Fuel Vehicles (CFVs)	1997	1998	2000	2001		
Number of Vehicles - Gasoline Vehicles						
Miles Traveled - Gasoline Vehicles						
Gas Use (gallons) - Gasoline Vehicles						
Gasoline Cost - Gasoline Vehicles						
Gasoline Cost per Gallon						
Maintenance Cost - Gasoline Vehicles						
Maint. Cost per Mile - Gasoline Vehicles						
Number of Vehicles - Passenger Cars						
Miles Traveled - Passenger Cars						
Miles Traveled per Passenger Car						
Gas Use (gallons) - Passenger Cars						
Miles per Gallon - Passenger Cars						
Gasoline Cost - Passenger Cars						
Maintenance Cost - Passenger Cars						
Maint. Cost per Mile - Passenger Cars						
Number of Vehicles - Light Trucks						
Miles Traveled - Light Trucks						
Miles Traveled per Light Truck						
Gas Use (gallons) - Light Trucks						
Miles per Gallon - Light Trucks						
Gasoline Cost - Light Trucks						
Maintenance Cost - Light Trucks						
Maint. Cost per Mile - Light Trucks						
Number of Vehicles - Diesel Vehicles						
Miles Traveled - Diesel Vehicles						
Miles Traveled per Diesel Vehicle						
Diesel Fuel Use (GGE) - Diesel Vehicles						
Diesel Fuel Cost - Diesel Vehicles						
B20 Fuel Use (GGE) - Diesel Vehicles						
B20 Fuel Cost - Diesel Vehicles						
Maintenance Cost - Diesel Vehicles						
Maint. Cost per Mile - Diesel Vehicles						
Number of Gasoline Buses						
Number of Gasoline Truck Others						
Number of Exempted Vehicles	36	35	36	37	30	
CFV Acquisitions - Only New CFVs						
CFVs, AFVs and Exempted Vehicles	36	35	36	37	30	

	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs							
Miles Traveled - AFVs							
Gas Fuel Use (gallons) - AFVs		A14					
Alt. Fuel Use (GGE) - AFVs			e fuel vehicle a nts - section 414				
Percent Alt. Fuel Use in AFVs		Missouri Rev	rised Statutes -	only apply to			
Alt. Fuel Cost - AFVs		state agenc	ies with 15 or m vehicles.	nore eligible			
Maintenance Cost - AFVs							
AFV Acquisitions - Only New AFVs							
Percent AFVs of New Acquisitions							
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles							
Miles Traveled - E85 Vehicles							
Miles Traveled per E85 Vehicle							
Gas Fuel Use (gallons) - E85 Vehicles							
E85 Fuel Use (GGE) - E85 Vehicles							
E85 Fuel Cost - E85 Vehicles							
E85 Fuel Cost per GGE							
Maintenance Cost - E85 Vehicles							
Maint. Cost per Mile - E85 Vehicles							
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

Cummary tables contain data reported by state to	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year					
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - Gasoline Vehicles	13	13	13	11	10	
Miles Traveled - Gasoline Vehicles	122,896	109,993	141,118	103,456	74,487	
Gas Use (gallons) - Gasoline Vehicles	6,902	6,685	7,365	6,391	4,168	
Gasoline Cost - Gasoline Vehicles	\$7,558	\$7,270	\$8,038	\$8,162	\$4,513	
Gasoline Cost per Gallon	\$1.10	\$1.09	\$1.09	\$1.28	\$1.08	
Maintenance Cost - Gasoline Vehicles	\$1,995	\$1,855	\$6,423	\$3,131	\$1,832	
Maint. Cost per Mile - Gasoline Vehicles	\$0.016	\$0.017	\$0.046	\$0.030	\$0.025	
Number of Vehicles - Passenger Cars	8	7	7	5	5	
Miles Traveled - Passenger Cars	74,413	68,620	78,219	47,504	45,455	
Miles Traveled per Passenger Car	9,302	9,803	11,174	9,501	9,091	
Gas Use (gallons) - Passenger Cars	3,286	3,438	3,112	1,920	1,607	
Miles per Gallon - Passenger Cars	22.6	20.0	25.1	24.7	28.3	
Gasoline Cost - Passenger Cars	\$3,576	\$3,781	\$3,401	\$2,439	\$2,466	
Maintenance Cost - Passenger Cars	\$1,620	\$1,090	\$5,203	\$1,527	\$945	
Maint. Cost per Mile - Passenger Cars	\$0.022	\$0.016	\$0.067	\$0.032	\$0.021	
Number of Vehicles - Light Trucks	4	5	5	5	4	
Miles Traveled - Light Trucks	44,024	32,041	53,296	45,722	20,061	
Miles Traveled per Light Truck	11,006	6,408	10,659	9,144	5,015	
Gas Use (gallons) - Light Trucks	2,996	2,043	3,141	2,198	1,052	
Miles per Gallon - Light Trucks	14.7	15.7	17.0	20.8	19.1	
Gasoline Cost - Light Trucks	\$3,358	\$2,245	\$3,452	\$2,813	\$999	
Maintenance Cost - Light Trucks	\$300	\$645	\$750	\$1,464	\$677	
Maint. Cost per Mile - Light Trucks	\$0.007	\$0.020	\$0.014	\$0.032	\$0.034	
Number of Vehicles - Diesel Vehicles						
Miles Traveled - Diesel Vehicles						
Miles Traveled per Diesel Vehicle						
Diesel Fuel Use (GGE) - Diesel Vehicles						
Diesel Fuel Cost - Diesel Vehicles						
B20 Fuel Use (GGE) - Diesel Vehicles						
B20 Fuel Cost - Diesel Vehicles						
Maintenance Cost - Diesel Vehicles						
Maint. Cost per Mile - Diesel Vehicles						
Number of Gasoline Buses	0	0	0	0	0	
Number of Gasoline Truck Others	1	1	1	1	1	
Number of Exempted Vehicles	0	0	0	0	0	
CFV Acquisitions - Only New CFVs		2	0	0	0	
CFVs, AFVs and Exempted Vehicles	13	13	13	14	15	

	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs				3	5		
Miles Traveled - AFVs				36,134	74,898		
Gas Fuel Use (gallons) - AFVs				1,468	2,616		
Alt. Fuel Use (GGE) - AFVs				0	0		
Percent Alt. Fuel Use in AFVs				0	0		
Alt. Fuel Cost - AFVs				0	0		
Maintenance Cost - AFVs				\$250	\$1,139		
AFV Acquisitions - Only New AFVs			2	1	2		
Percent AFVs of New Acquisitions			100%	100%	100%		
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles				3	5		
Miles Traveled - E85 Vehicles				36,134	74,898		
Miles Traveled per E85 Vehicle				12,045	14,980		
Gas Fuel Use (gallons) - E85 Vehicles				1,468	2,616		
E85 Fuel Use (GGE) - E85 Vehicles				0	0		
E85 Fuel Cost - E85 Vehicles				0	0		
E85 Fuel Cost per GGE				0	0		
Maintenance Cost - E85 Vehicles				\$250	\$1,139		
Maint. Cost per Mile - E85 Vehicles				\$0.0069	\$0.0152		
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

Summary tables contain data reported by state	agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year					
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - Gasoline Vehicles	3	3	4	3	3	
Miles Traveled - Gasoline Vehicles	31,670	26,282	32,630	24,040	33,998	
Gas Use (gallons) - Gasoline Vehicles	1,348	1,322	1,660	1,081	1,626	
Gasoline Cost - Gasoline Vehicles	\$1,601	\$1,470	\$1,665	\$1,562	\$2,295	
Gasoline Cost per Gallon	\$1.19	\$1.11	\$1.00	\$1.44	\$1.41	
Maintenance Cost - Gasoline Vehicles	\$407	\$885	\$2,205	\$668	\$642	
Maint. Cost per Mile - Gasoline Vehicles	\$0.013	\$0.034	\$0.068	\$0.028	\$0.019	
Number of Vehicles - Passenger Cars	1	1	1	1	1	
Miles Traveled - Passenger Cars	2,715	4,931	8,252	4,017	16,941	
Miles Traveled per Passenger Car	2,715	4,931	8,252	4,017	16,941	
Gas Use (gallons) - Passenger Cars	164	245	420	150	704	
Miles per Gallon - Passenger Cars	16.6	20.1	19.6	26.8	24.1	
Gasoline Cost - Passenger Cars	\$230	\$313	\$475	\$200	\$1,081	
Maintenance Cost - Passenger Cars	\$6	\$100	\$552	\$289	\$394	
Maint. Cost per Mile - Passenger Cars	\$0.002	\$0.020	\$0.067	\$0.072	\$0.023	
Number of Vehicles - Light Trucks	2	2	3	2	2	
Miles Traveled - Light Trucks	28,955	21,351	24,378	20,023	17,057	
Miles Traveled per Light Truck	14,478	10,676	8,126	10,012	8,529	
Gas Use (gallons) - Light Trucks	1,184	1,077	1,240	931	922	
Miles per Gallon - Light Trucks	24.5	19.8	19.7	21.5	18.5	
Gasoline Cost - Light Trucks	\$1,371	\$1,158	\$1,190	\$1,362	\$1,214	
Maintenance Cost - Light Trucks	\$401	\$785	\$1,653	\$379	\$248	
Maint. Cost per Mile - Light Trucks	\$0.014	\$0.037	\$0.068	\$0.019	\$0.015	
Number of Vehicles - Diesel Vehicles						
Miles Traveled - Diesel Vehicles						
Miles Traveled per Diesel Vehicle						
Diesel Fuel Use (GGE) - Diesel Vehicles						
Diesel Fuel Cost - Diesel Vehicles						
B20 Fuel Use (GGE) - Diesel Vehicles						
B20 Fuel Cost - Diesel Vehicles						
Maintenance Cost - Diesel Vehicles						
Maint. Cost per Mile - Diesel Vehicles						
Number of Gasoline Buses	0	0	0	0	0	
Number of Gasoline Truck Others	0	0	0	0	0	
Number of Exempted Vehicles	0	0	0	0	0	
CFV Acquisitions - Only New CFVs		0	0	0	1	
CFVs, AFVs and Exempted Vehicles	3	3	4	3	3	

	agencies. Estimates (est) are provided when the actual data is unavailable / inconsiste Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs							
Miles Traveled - AFVs							
Gas Fuel Use (gallons) - AFVs		Altamastin	o fuel vekiele e				
Alt. Fuel Use (GGE) - AFVs			re fuel vehicle a nts - section 41				
Percent Alt. Fuel Use in AFVs		Missouri Rev	vised Statutes -	only apply to			
Alt. Fuel Cost - AFVs		state agenc	ies with 15 or n vehicles.	nore eligible			
Maintenance Cost - AFVs							
AFV Acquisitions - Only New AFVs							
Percent AFVs of New Acquisitions							
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles							
Miles Traveled - E85 Vehicles							
Miles Traveled per E85 Vehicle							
Gas Fuel Use (gallons) - E85 Vehicles							
E85 Fuel Use (GGE) - E85 Vehicles							
E85 Fuel Cost - E85 Vehicles							
E85 Fuel Cost per GGE							
Maintenance Cost - E85 Vehicles							
Maint. Cost per Mile - E85 Vehicles							
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles				Τ			

Cummary tables contain data reported by state to	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year					
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - Gasoline Vehicles	2	2	3	2	2	
Miles Traveled - Gasoline Vehicles	28,652	26,904	21,581	10,824	1,298	
Gas Use (gallons) - Gasoline Vehicles	1,105	1,118	925	435	100	
Gasoline Cost - Gasoline Vehicles	\$1,137	\$1,034	\$752	\$535	\$141	
Gasoline Cost per Gallon	\$1.03	\$0.92	\$0.81	\$1.23	\$1.41	
Maintenance Cost - Gasoline Vehicles	\$722	\$1,231	\$916	\$619	\$626	
Maint. Cost per Mile - Gasoline Vehicles	\$0.025	\$0.046	\$0.042	\$0.057	\$0.482	
Number of Vehicles - Passenger Cars	2	2	2	1	1	
Miles Traveled - Passenger Cars	28,652	26,904	18,165	9,600	88	
Miles Traveled per Passenger Car	14,326	13,452	9,083	9,600	88	
Gas Use (gallons) - Passenger Cars	1,105	1,118	808	384	0	
Miles per Gallon - Passenger Cars	25.9	24.1	22.5	25.0	0	
Gasoline Cost - Passenger Cars	\$1,137	\$1,034	\$653	\$472	0	
Maintenance Cost - Passenger Cars	\$722	\$1,231	\$876	\$510	\$111	
Maint. Cost per Mile - Passenger Cars	\$0.025	\$0.046	\$0.048	\$0.053	\$1.261	
Number of Vehicles - Light Trucks			1	1	1	
Miles Traveled - Light Trucks			3,416	1,224	1,210	
Miles Traveled per Light Truck			3,416	1,224	1,210	
Gas Use (gallons) - Light Trucks			117	51	100	
Miles per Gallon - Light Trucks			29.2	24.0	12.1	
Gasoline Cost - Light Trucks			\$99	\$63	\$141	
Maintenance Cost - Light Trucks			\$40	\$109	\$515	
Maint. Cost per Mile - Light Trucks			\$0.012	\$0.089	\$0.426	
Number of Vehicles - Diesel Vehicles						
Miles Traveled - Diesel Vehicles						
Miles Traveled per Diesel Vehicle						
Diesel Fuel Use (GGE) - Diesel Vehicles						
Diesel Fuel Cost - Diesel Vehicles						
B20 Fuel Use (GGE) - Diesel Vehicles						
B20 Fuel Cost - Diesel Vehicles						
Maintenance Cost - Diesel Vehicles						
Maint. Cost per Mile - Diesel Vehicles						
Number of Gasoline Buses	0	0	0	0	0	
Number of Gasoline Truck Others	0	0	0	0	0	
Number of Exempted Vehicles	0	0	0	0	0	
CFV Acquisitions - Only New CFVs		0	0	0	0	
CFVs, AFVs and Exempted Vehicles	2	3	4	3	3	

	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs		1	1	1	1		
Miles Traveled - AFVs		63	21,104	7,567	5,130		
Gas Fuel Use (gallons) - AFVs		3	915	329	191		
Alt. Fuel Use (GGE) - AFVs		0	0	0	0		
Percent Alt. Fuel Use in AFVs		0	0	0	0		
Alt. Fuel Cost - AFVs		0	0	0	0		
Maintenance Cost - AFVs		\$361	\$249	\$537	\$154		
AFV Acquisitions - Only New AFVs		1	0	0	0		
Percent AFVs of New Acquisitions		100%	0	0	0		
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles		1	1	1	1		
Miles Traveled - E85 Vehicles		63	21,104	7,567	5,130		
Miles Traveled per E85 Vehicle		63	21,104	7,567	5,130		
Gas Fuel Use (gallons) - E85 Vehicles		3	915	329	191		
E85 Fuel Use (GGE) - E85 Vehicles		0	0	0	0		
E85 Fuel Cost - E85 Vehicles		0	0	0	0		
E85 Fuel Cost per GGE		0	0	0	0		
Maintenance Cost - E85 Vehicles		\$361	\$249	\$537	\$154		
Maint. Cost per Mile - E85 Vehicles		\$5.7302	\$0.0118	\$0.0710	\$0.0300		
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

Cummary tables contain data reported by state	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	205	205	205	277	251		
Miles Traveled - Gasoline Vehicles	3,369,819	3,303,331	3,157,867	3,464,619	3,910,115		
Gas Use (gallons) - Gasoline Vehicles	160,294	158,458	158,919	172,259	171,361		
Gasoline Cost - Gasoline Vehicles	\$179,600	\$164,342	\$143,135	\$204,117	\$244,209		
Gasoline Cost per Gallon	\$1.12	\$1.04	\$0.90	\$1.18	\$1.43		
Maintenance Cost - Gasoline Vehicles	\$51,478	\$66,236	\$57,241	\$51,191	\$52,540		
Maint. Cost per Mile - Gasoline Vehicles	\$0.015	\$0.020	\$0.018	\$0.015	\$0.013		
Number of Vehicles - Passenger Cars	115	111	101	157	138		
Miles Traveled - Passenger Cars	1,994,667	1,859,537	1,678,358	1,865,939	2,108,291		
Miles Traveled per Passenger Car	17,345	16,753	16,617	11,885	15,277		
Gas Use (gallons) - Passenger Cars	80,888	74,772	71,818	72,990	77,779		
Miles per Gallon - Passenger Cars	24.7	24.9	23.4	25.6	27.1		
Gasoline Cost - Passenger Cars	\$91,016	\$79,376	\$65,603	\$89,749	\$112,027		
Maintenance Cost - Passenger Cars	\$29,644	\$38,683	\$29,806	\$25,834	\$26,555		
Maint. Cost per Mile - Passenger Cars	\$0.015	\$0.021	\$0.018	\$0.014	\$0.013		
Number of Vehicles - Light Trucks	90	93	104	108	101		
Miles Traveled - Light Trucks	1,375,152	1,443,794	1,479,509	1,414,367	1,589,207		
Miles Traveled per Light Truck	15,279	15,525	14,226	13,096	15,735		
Gas Use (gallons) - Light Trucks	79,406	83,686	87,101	88,734	81,311		
Miles per Gallon - Light Trucks	17.3	17.3	17.0	15.9	19.5		
Gasoline Cost - Light Trucks	\$88,584	\$84,966	\$77,532	\$101,064	\$115,430		
Maintenance Cost - Light Trucks	\$21,834	\$26,828	\$27,435	\$20,572	\$20,607		
Maint. Cost per Mile - Light Trucks	\$0.016	\$0.019	\$0.019	\$0.015	\$0.013		
Number of Vehicles - Diesel Vehicles	10		1		8		
Miles Traveled - Diesel Vehicles	126,687		10,511		114,311		
Miles Traveled per Diesel Vehicle	12,669		10,511		14,289		
Diesel Fuel Use (GGE) - Diesel Vehicles	24,122		368		20,979		
Diesel Fuel Cost - Diesel Vehicles	\$22,501		\$296		\$25,140		
B20 Fuel Use (GGE) - Diesel Vehicles	0		0		0		
B20 Fuel Cost - Diesel Vehicles	0		0		0		
Maintenance Cost - Diesel Vehicles	\$8,226		\$631		\$14,677		
Maint. Cost per Mile - Diesel Vehicles	\$0.065		\$0.060		\$0.128		
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	0	1	0	12	12		
Number of Exempted Vehicles	46	31	34	8	8		
CFV Acquisitions - Only New CFVs		4	16	50	0		
CFVs, AFVs and Exempted Vehicles	280	253	254	326	312		

Alternative Fuel Vehicles (AFVs)	Fiscal Year					
	1997	1998	1999	2000	2001	
Number of Vehicles - AFVs	19	17	14	41	45	
Miles Traveled - AFVs	153,526	265,279	172,829	462,524	801,885	
Gas Fuel Use (gallons) - AFVs	4,394	7,108	4,451	15,691	27,249	
Alt. Fuel Use (GGE) - AFVs	1,417	2,919	2,567	2,350	2,409	
Percent Alt. Fuel Use in AFVs	24%	29%	37%	13%	8%	
Alt. Fuel Cost - AFVs	\$2,192	\$4,380	\$2,877	\$4,128	\$3,919	
Maintenance Cost - AFVs	\$2,431	\$4,531	\$1,064	\$4,728	\$7,539	
AFV Acquisitions - Only New AFVs		3	5	18	8	
Percent AFVs of New Acquisitions		43%	24%	26%	100%	
Number of Vehicles - CNG Vehicles						
Miles Traveled - CNG Vehicles						
Miles Traveled per CNG Vehicle						
Gas Fuel Use (gallons) - CNG Vehicles						
CNG Fuel Use (GGE) - CNG Vehicles						
CNG Fuel Cost - CNG Vehicles						
CNG Fuel Cost per GGE						
Maintenance Cost - CNG Vehicles						
Maint. Cost per Mile - CNG Vehicles						
Number of Vehicles - E85 Vehicles	18	16	13	40	44	
Miles Traveled - E85 Vehicles	144,286	257,902	165,935	461,865	801,132	
Miles Traveled per E85 Vehicle	8,016	16,119	12,764	11,547	18,208	
Gas Fuel Use (gallons) - E85 Vehicles	3,825	7,001	4,261	15,691	27,211	
E85 Fuel Use (GGE) - E85 Vehicles	1,417	2,666	2,304	1,916	2,302	
E85 Fuel Cost - E85 Vehicles	\$2,192	\$4,218	\$2,734	\$3,746	\$3,795	
E85 Fuel Cost per GGE	\$1.55	\$1.58	\$1.19	\$1.96	\$1.65	
Maintenance Cost - E85 Vehicles	\$2,233	\$4,305	\$1,064	\$4,728	\$7,539	
Maint. Cost per Mile - E85 Vehicles	\$0.0155	\$0.0167	\$0.0064	\$0.0102	\$0.0094	
Number of Vehicles - LPG Vehicles	1	1	1	1	1	
Miles Traveled - LPG Vehicles	9,240	7,377	6,894	659	753	
Miles Traveled per LPG Vehicle	9,240	7,377	6,894	659	753	
Gas Fuel Use (gallons) - LPG Vehicles	569	107	190	0	38	
LPG Fuel Use (GGE) - LPG Vehicles	0	253	263	435	107	
LPG Fuel Cost - LPG Vehicles	0	\$122	\$143	\$381	\$125	
LPG Fuel Cost per GGE	0	\$0.48	\$0.54	\$0.88	\$1.17	
Maintenance Cost - LPG Vehicles	\$198	\$226	0	0	0	
Maint. Cost per Mile - LPG Vehicles	\$0.0214	\$0.0306	0	0	0	

Cummary tables contain data reported by state	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997 est	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	145	169	181	172	124		
Miles Traveled - Gasoline Vehicles	1,818,266	2,256,707	2,144,928	1,941,694	1,568,561		
Gas Use (gallons) - Gasoline Vehicles	90,455	108,554	122,618	91,977	77,230		
Gasoline Cost - Gasoline Vehicles	\$88,561	\$107,388	\$119,556	\$107,080	\$105,323		
Gasoline Cost per Gallon	\$0.98	\$0.99	\$0.98	\$1.16	\$1.36		
Maintenance Cost - Gasoline Vehicles	\$53,436	\$82,021	\$73,587	\$58,242	\$37,945		
Maint. Cost per Mile - Gasoline Vehicles	\$0.029	\$0.036	\$0.034	\$0.030	\$0.024		
Number of Vehicles - Passenger Cars	68	65	57	61	29		
Miles Traveled - Passenger Cars	875,433	872,392	748,259	760,822	399,725		
Miles Traveled per Passenger Car	12,874	13,421	13,127	12,472	13,784		
Gas Use (gallons) - Passenger Cars	35,200	33,881	34,433	29,195	15,609		
Miles per Gallon - Passenger Cars	24.9	25.7	21.7	26.1	25.6		
Gasoline Cost - Passenger Cars	\$34,174	\$33,741	\$33,106	\$33,752	\$21,340		
Maintenance Cost - Passenger Cars	\$19,844	\$26,164	\$20,494	\$20,011	\$10,343		
Maint. Cost per Mile - Passenger Cars	\$0.023	\$0.030	\$0.027	\$0.026	\$0.026		
Number of Vehicles - Light Trucks	77	104	124	111	95		
Miles Traveled - Light Trucks	942,833	1,384,315	1,396,669	1,180,872	1,168,836		
Miles Traveled per Light Truck	12,245	13,311	11,263	10,638	12,304		
Gas Use (gallons) - Light Trucks	55,255	74,673	88,185	62,782	61,621		
Miles per Gallon - Light Trucks	17.1	18.5	15.8	18.8	19.0		
Gasoline Cost - Light Trucks	\$54,387	\$73,647	\$86,450	\$73,329	\$83,983		
Maintenance Cost - Light Trucks	\$33,592	\$55,857	\$53,093	\$38,231	\$27,603		
Maint. Cost per Mile - Light Trucks	\$0.036	\$0.040	\$0.038	\$0.032	\$0.024		
Number of Vehicles - Diesel Vehicles							
Miles Traveled - Diesel Vehicles							
Miles Traveled per Diesel Vehicle							
Diesel Fuel Use (GGE) - Diesel Vehicles							
Diesel Fuel Cost - Diesel Vehicles							
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles							
Maint. Cost per Mile - Diesel Vehicles							
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	0	0	0	0	0		
Number of Exempted Vehicles	919	746	1,065	931	971		
CFV Acquisitions - Only New CFVs		0	1	27	2		
CFVs, AFVs and Exempted Vehicles	1,064	924	1,255	1,122	1,120		

	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs		9	9	19	25		
Miles Traveled - AFVs		171,226	129,107	212,918	317,167		
Gas Fuel Use (gallons) - AFVs		6,368	5,001	6,981	11,228		
Alt. Fuel Use (GGE) - AFVs		355	355	1,381	836		
Percent Alt. Fuel Use in AFVs		5%	7%	17%	7%		
Alt. Fuel Cost - AFVs		\$650	\$650	\$2,429	\$1,665		
Maintenance Cost - AFVs		\$2,363	\$3,331	\$3,363	\$4,739		
AFV Acquisitions - Only New AFVs		0	0	12	10		
Percent AFVs of New Acquisitions		0	0	31%	83%		
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles		9	9	19	25		
Miles Traveled - E85 Vehicles		171,226	129,107	212,918	317,167		
Miles Traveled per E85 Vehicle		19,025	14,345	11,206	12,687		
Gas Fuel Use (gallons) - E85 Vehicles		6,368	5,001	6,981	11,228		
E85 Fuel Use (GGE) - E85 Vehicles		355	355	1,381	836		
E85 Fuel Cost - E85 Vehicles		\$650	\$650	\$2,429	\$1,665		
E85 Fuel Cost per GGE		\$1.83	\$1.83	\$1.76	\$1.99		
Maintenance Cost - E85 Vehicles		\$2,363	\$3,331	\$3,363	\$4,739		
Maint. Cost per Mile - E85 Vehicles		\$0.0138	\$0.0258	\$0.0158	\$0.0149		
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

Cummary tables contain data reported by state	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	486	215	204	213	185		
Miles Traveled - Gasoline Vehicles	5,951,998	2,852,858	2,844,629	1,868,403	1,968,532		
Gas Use (gallons) - Gasoline Vehicles	349,543	175,049	149,611	118,030	138,072		
Gasoline Cost - Gasoline Vehicles	\$419,447	\$173,348	\$149,611	\$135,179	\$206,914		
Gasoline Cost per Gallon	\$1.20	\$0.99	\$1.00	\$1.15	\$1.50		
Maintenance Cost - Gasoline Vehicles	\$947,167	\$53,750	\$51,000	\$72,426	\$33,963		
Maint. Cost per Mile - Gasoline Vehicles	\$0.159	\$0.019	\$0.018	\$0.039	\$0.017		
Number of Vehicles - Passenger Cars	296	71	66	85	82		
Miles Traveled - Passenger Cars	3,983,205	835,873	884,739	1,309,741	1,162,424		
Miles Traveled per Passenger Car	13,457	11,773	13,405	15,409	14,176		
Gas Use (gallons) - Passenger Cars	191,886	41,752	38,876	70,603	68,659		
Miles per Gallon - Passenger Cars	20.8	20.0	22.8	18.6	16.9		
Gasoline Cost - Passenger Cars	\$230,261	\$41,334	\$38,876	\$79,477	\$102,991		
Maintenance Cost - Passenger Cars	\$576,889	\$17,750	\$16,500	\$38,412	\$22,840		
Maint. Cost per Mile - Passenger Cars	\$0.145	\$0.021	\$0.019	\$0.029	\$0.020		
Number of Vehicles - Light Trucks	158	143	138	89	102		
Miles Traveled - Light Trucks	1,745,353	2,007,829	1,959,890	489,416	802,993		
Miles Traveled per Light Truck	11,047	14,041	14,202	5,499	7,872		
Gas Use (gallons) - Light Trucks	116,959	131,191	110,735	38,122	69,179		
Miles per Gallon - Light Trucks	14.9	15.3	17.7	12.8	11.6		
Gasoline Cost - Light Trucks	\$140,349	\$129,929	\$110,735	\$44,841	\$103,572		
Maintenance Cost - Light Trucks	\$307,942	\$35,750	\$34,500	\$29,188	\$11,048		
Maint. Cost per Mile - Light Trucks	\$0.176	\$0.018	\$0.018	\$0.060	\$0.014		
Number of Vehicles - Diesel Vehicles				2			
Miles Traveled - Diesel Vehicles				3,089			
Miles Traveled per Diesel Vehicle				1,545			
Diesel Fuel Use (GGE) - Diesel Vehicles				354			
Diesel Fuel Cost - Diesel Vehicles				\$321			
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles				\$164			
Maint. Cost per Mile - Diesel Vehicles				\$0.053			
Number of Gasoline Buses	32	1	0	0	0		
Number of Gasoline Truck Others	0	0	0	39	1		
Number of Exempted Vehicles	0	327	421	419	551		
CFV Acquisitions - Only New CFVs		59	29	27	5		
CFVs, AFVs and Exempted Vehicles	500	564	652	674	766		

Alternative Fuel Vehicles (AFVs)	Fiscal Year					
	1997	1998	1999	2000	2001	
Number of Vehicles - AFVs	14	22	27	42	30	
Miles Traveled - AFVs	54,808	226,840	181,163	455,433	626,908	
Gas Fuel Use (gallons) - AFVs	3,680	11,574	9,987	24,958	27,795	
Alt. Fuel Use (GGE) - AFVs	263	2,667	4,099	5,968	6,063	
Percent Alt. Fuel Use in AFVs	7%	19%	29%	19%	18%	
Alt. Fuel Cost - AFVs	\$305	\$1,901	\$5,324	\$5,551	\$12,662	
Maintenance Cost - AFVs	\$1,173	\$5,500	\$6,750	\$27,673	\$6,950	
AFV Acquisitions - Only New AFVs		0	15	0	0	
Percent AFVs of New Acquisitions		0	34%	0	0	
Number of Vehicles - CNG Vehicles						
Miles Traveled - CNG Vehicles						
Miles Traveled per CNG Vehicle						
Gas Fuel Use (gallons) - CNG Vehicles						
CNG Fuel Use (GGE) - CNG Vehicles						
CNG Fuel Cost - CNG Vehicles						
CNG Fuel Cost per GGE						
Maintenance Cost - CNG Vehicles						
Maint. Cost per Mile - CNG Vehicles						
Number of Vehicles - E85 Vehicles			2	2	6	
Miles Traveled - E85 Vehicles			928	3,665	95,180	
Miles Traveled per E85 Vehicle			464	1,833	15,863	
Gas Fuel Use (gallons) - E85 Vehicles			1	99	3,900	
E85 Fuel Use (GGE) - E85 Vehicles			47	0	359	
E85 Fuel Cost - E85 Vehicles			\$61	0	\$808	
E85 Fuel Cost per GGE			\$1.30	0	\$2.25	
Maintenance Cost - E85 Vehicles			\$500	\$108	\$200	
Maint. Cost per Mile - E85 Vehicles			\$0.5388	\$0.0295	\$0.0021	
Number of Vehicles - LPG Vehicles	14	22	25	40	24	
Miles Traveled - LPG Vehicles	54,808	226,840	180,235	451,768	531,728	
Miles Traveled per LPG Vehicle	3,915	10,311	7,209	11,294	22,155	
Gas Fuel Use (gallons) - LPG Vehicles	3,680	11,574	9,986	24,859	23,895	
LPG Fuel Use (GGE) - LPG Vehicles	263	2,667	4,052	5,968	5,704	
LPG Fuel Cost - LPG Vehicles	\$305	\$1,901	\$5,263	\$5,551	\$11,854	
LPG Fuel Cost per GGE	\$1.16	\$0.71	\$1.30	\$0.93	\$2.08	
Maintenance Cost - LPG Vehicles	\$1,173	\$5,500	\$6,250	\$27,565	\$6,750	
Maint. Cost per Mile - LPG Vehicles	\$0.0214	\$0.0242	\$0.0347	\$0.0610	\$0.0127	

CFV Summary TableDepartment of Economic Development
Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

	Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	136	143	138	135	121		
Miles Traveled - Gasoline Vehicles	2,033,387	2,029,973	1,965,649	1,797,627	1,423,162		
Gas Use (gallons) - Gasoline Vehicles	82,106	82,968	79,728	79,014	62,969		
Gasoline Cost - Gasoline Vehicles	\$95,167	\$88,208	\$74,457	\$97,778	\$88,812		
Gasoline Cost per Gallon	\$1.16	\$1.06	\$0.93	\$1.24	\$1.41		
Maintenance Cost - Gasoline Vehicles	\$49,311	\$51,580	\$40,019	\$49,484	\$28,375		
Maint. Cost per Mile - Gasoline Vehicles	\$0.024	\$0.025	\$0.020	\$0.028	\$0.020		
Number of Vehicles - Passenger Cars	118	120	114	105	91		
Miles Traveled - Passenger Cars	1,784,462	1,739,960	1,590,615	1,335,766	993,788		
Miles Traveled per Passenger Car	15,123	14,500	13,953	12,722	10,921		
Gas Use (gallons) - Passenger Cars	68,858	68,254	60,947	55,877	39,569		
Miles per Gallon - Passenger Cars	25.9	25.5	26.1	23.9	25.1		
Gasoline Cost - Passenger Cars	\$80,102	\$72,800	\$56,818	\$68,756	\$56,290		
Maintenance Cost - Passenger Cars	\$45,691	\$46,618	\$32,481	\$41,244	\$22,310		
Maint. Cost per Mile - Passenger Cars	\$0.026	\$0.027	\$0.020	\$0.031	\$0.022		
Number of Vehicles - Light Trucks	18	20	22	27	27		
Miles Traveled - Light Trucks	248,925	275,260	356,819	396,696	361,733		
Miles Traveled per Light Truck	13,829	13,763	16,219	14,692	13,398		
Gas Use (gallons) - Light Trucks	13,248	13,531	17,166	19,755	18,879		
Miles per Gallon - Light Trucks	18.8	20.3	20.8	20.1	19.2		
Gasoline Cost - Light Trucks	\$15,065	\$14,370	\$16,202	\$24,675	\$25,991		
Maintenance Cost - Light Trucks	\$3,620	\$4,231	\$7,176	\$6,325	\$5,585		
Maint. Cost per Mile - Light Trucks	\$0.015	\$0.015	\$0.020	\$0.016	\$0.015		
Number of Vehicles - Diesel Vehicles							
Miles Traveled - Diesel Vehicles							
Miles Traveled per Diesel Vehicle							
Diesel Fuel Use (GGE) - Diesel Vehicles							
Diesel Fuel Cost - Diesel Vehicles							
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles							
Maint. Cost per Mile - Diesel Vehicles							
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	0	3	2	3	3		
Number of Exempted Vehicles	24	23	20	32	52		
CFV Acquisitions - Only New CFVs		24	8	15	8		
CFVs, AFVs and Exempted Vehicles	165	171	176	185	211		

AFV Summary Table Department of Economic Development Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs	5	5	18	18	38		
Miles Traveled - AFVs	26,229	59,788	217,186	303,748	381,622		
Gas Fuel Use (gallons) - AFVs	961	2,108	7,329	10,798	14,365		
Alt. Fuel Use (GGE) - AFVs	58	152	362	1,045	552		
Percent Alt. Fuel Use in AFVs	6%	7%	5%	9%	4%		
Alt. Fuel Cost - AFVs	\$100	\$256	\$538	\$1,988	\$1,209		
Maintenance Cost - AFVs	\$56	\$306	\$1,097	\$3,416	\$4,714		
AFV Acquisitions - Only New AFVs		2	12	2	20		
Percent AFVs of New Acquisitions		8%	60%	12%	71%		
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles	5	5	18	18	38		
Miles Traveled - E85 Vehicles	26,229	59,788	217,186	303,748	381,622		
Miles Traveled per E85 Vehicle	5,246	11,958	12,066	16,875	10,043		
Gas Fuel Use (gallons) - E85 Vehicles	961	2,108	7,329	10,798	14,365		
E85 Fuel Use (GGE) - E85 Vehicles	58	152	362	1,045	552		
E85 Fuel Cost - E85 Vehicles	\$100	\$256	\$538	\$1,988	\$1,209		
E85 Fuel Cost per GGE	\$1.72	\$1.68	\$1.49	\$1.90	\$2.19		
Maintenance Cost - E85 Vehicles	\$56	\$306	\$1,097	\$3,416	\$4,714		
Maint. Cost per Mile - E85 Vehicles	\$0.0021	\$0.0051	\$0.0051	\$0.0112	\$0.0124		
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

Cummary tables contain data reported by state	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997 est	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	25	24	20	13	15		
Miles Traveled - Gasoline Vehicles	338,128	170,245	255,111	172,486	151,785		
Gas Use (gallons) - Gasoline Vehicles	11,737	6,722	9,693	7,330	6,036		
Gasoline Cost - Gasoline Vehicles	\$11,814	\$6,732	\$8,916	\$9,016	\$8,511		
Gasoline Cost per Gallon	\$1.01	\$1.00	\$0.92	\$1.23	\$1.41		
Maintenance Cost - Gasoline Vehicles	\$6,042	\$4,805	\$6,575	\$4,723	\$5,298		
Maint. Cost per Mile - Gasoline Vehicles	\$0.018	\$0.028	\$0.026	\$0.027	\$0.035		
Number of Vehicles - Passenger Cars	20	18	20	9	12		
Miles Traveled - Passenger Cars	262,829	120,521	255,111	106,355	99,415		
Miles Traveled per Passenger Car	13,141	6,696	12,756	11,817	8,285		
Gas Use (gallons) - Passenger Cars	8,912	4,398	9,693	4,383	3,782		
Miles per Gallon - Passenger Cars	29.5	27.4	26.3	24.3	26.3		
Gasoline Cost - Passenger Cars	\$8,829	\$4,354	\$8,916	\$5,391	\$5,333		
Maintenance Cost - Passenger Cars	\$4,721	\$2,856	\$6,575	\$1,285	\$2,988		
Maint. Cost per Mile - Passenger Cars	\$0.018	\$0.024	\$0.026	\$0.012	\$0.030		
Number of Vehicles - Light Trucks	5	6		4	3		
Miles Traveled - Light Trucks	75,299	49,724		66,131	52,370		
Miles Traveled per Light Truck	15,060	8,287		16,533	17,457		
Gas Use (gallons) - Light Trucks	2,824	2,324		2,947	2,254		
Miles per Gallon - Light Trucks	26.7	21.4		22.4	23.2		
Gasoline Cost - Light Trucks	\$2,986	\$2,379		\$3,625	\$3,178		
Maintenance Cost - Light Trucks	\$1,321	\$1,949		\$3,438	\$2,310		
Maint. Cost per Mile - Light Trucks	\$0.018	\$0.039		\$0.052	\$0.044		
Number of Vehicles - Diesel Vehicles							
Miles Traveled - Diesel Vehicles							
Miles Traveled per Diesel Vehicle							
Diesel Fuel Use (GGE) - Diesel Vehicles							
Diesel Fuel Cost - Diesel Vehicles							
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles							
Maint. Cost per Mile - Diesel Vehicles							
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	0	0	0	0	0		
Number of Exempted Vehicles	1	2	0	0	0		
CFV Acquisitions - Only New CFVs		6	1	0	2		
CFVs, AFVs and Exempted Vehicles	26	26	24	25	26		

AFV Summary Table Elementary and Secondary Education Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

Summary tables contain data reported by state	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs			4	12	11		
Miles Traveled - AFVs			52,889	190,193	179,002		
Gas Fuel Use (gallons) - AFVs			0	6,801	6,314		
Alt. Fuel Use (GGE) - AFVs			1,383	0	0		
Percent Alt. Fuel Use in AFVs			100%	0	0		
Alt. Fuel Cost - AFVs			\$1,840	0	0		
Maintenance Cost - AFVs			\$793	\$3,591	\$4,797		
AFV Acquisitions - Only New AFVs		0	8	4	0		
Percent AFVs of New Acquisitions		0	89%	100%	0		
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles			4	12	11		
Miles Traveled - E85 Vehicles			52,889	190,193	179,002		
Miles Traveled per E85 Vehicle			13,222	15,849	16,273		
Gas Fuel Use (gallons) - E85 Vehicles			0	6,801	6,314		
E85 Fuel Use (GGE) - E85 Vehicles			1,383	0	0		
E85 Fuel Cost - E85 Vehicles			\$1,840	0	0		
E85 Fuel Cost per GGE			\$1.33	0	0		
Maintenance Cost - E85 Vehicles			\$793	\$3,591	\$4,797		
Maint. Cost per Mile - E85 Vehicles			\$0.0150	\$0.0189	\$0.0268		
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

. ,	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	45	45	46	45	41		
Miles Traveled - Gasoline Vehicles	772,571	839,342	754,711	711,537	565,801		
Gas Use (gallons) - Gasoline Vehicles	33,411	29,833	27,721	26,412	21,280		
Gasoline Cost - Gasoline Vehicles	\$39,345	\$32,073	\$26,788	\$33,956	\$30,832		
Gasoline Cost per Gallon	\$1.18	\$1.08	\$0.97	\$1.29	\$1.45		
Maintenance Cost - Gasoline Vehicles	\$23,406	\$15,909	\$14,162	\$13,441	\$10,257		
Maint. Cost per Mile - Gasoline Vehicles	\$0.030	\$0.019	\$0.019	\$0.019	\$0.018		
Number of Vehicles - Passenger Cars	29	31	31	31	26		
Miles Traveled - Passenger Cars	564,854	648,391	575,518	546,842	432,686		
Miles Traveled per Passenger Car	19,478	20,916	18,565	17,640	16,642		
Gas Use (gallons) - Passenger Cars	19,782	20,637	18,641	17,991	14,059		
Miles per Gallon - Passenger Cars	28.6	31.4	30.9	30.4	30.8		
Gasoline Cost - Passenger Cars	\$23,451	\$21,985	\$18,091	\$23,034	\$20,438		
Maintenance Cost - Passenger Cars	\$13,001	\$10,104	\$9,449	\$9,565	\$5,773		
Maint. Cost per Mile - Passenger Cars	\$0.023	\$0.016	\$0.016	\$0.017	\$0.013		
Number of Vehicles - Light Trucks	15	14	15	14	15		
Miles Traveled - Light Trucks	194,630	190,951	179,193	164,695	133,115		
Miles Traveled per Light Truck	12,975	13,639	11,946	11,764	8,874		
Gas Use (gallons) - Light Trucks	11,009	9,196	9,080	8,422	7,220		
Miles per Gallon - Light Trucks	17.7	20.8	19.7	19.6	18.4		
Gasoline Cost - Light Trucks	\$13,159	\$10,088	\$8,697	\$10,922	\$10,393		
Maintenance Cost - Light Trucks	\$9,756	\$5,805	\$4,713	\$3,876	\$4,484		
Maint. Cost per Mile - Light Trucks	\$0.050	\$0.030	\$0.026	\$0.024	\$0.034		
Number of Vehicles - Diesel Vehicles							
Miles Traveled - Diesel Vehicles							
Miles Traveled per Diesel Vehicle							
Diesel Fuel Use (GGE) - Diesel Vehicles							
Diesel Fuel Cost - Diesel Vehicles							
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles							
Maint. Cost per Mile - Diesel Vehicles							
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	1	0	0	0	0		
Number of Exempted Vehicles	0	0	2	2	2		
CFV Acquisitions - Only New CFVs		1	6	0	3		
CFVs, AFVs and Exempted Vehicles	45	45	48	47	43		

Carminary razios comain acia repensa sy ciare	agencies. Estimates (est) are provided when the actual data is unavailable / inconsister Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs							
Miles Traveled - AFVs							
Gas Fuel Use (gallons) - AFVs							
Alt. Fuel Use (GGE) - AFVs							
Percent Alt. Fuel Use in AFVs							
Alt. Fuel Cost - AFVs							
Maintenance Cost - AFVs							
AFV Acquisitions - Only New AFVs							
Percent AFVs of New Acquisitions							
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles							
Miles Traveled - E85 Vehicles							
Miles Traveled per E85 Vehicle							
Gas Fuel Use (gallons) - E85 Vehicles							
E85 Fuel Use (GGE) - E85 Vehicles							
E85 Fuel Cost - E85 Vehicles							
E85 Fuel Cost per GGE							
Maintenance Cost - E85 Vehicles							
Maint. Cost per Mile - E85 Vehicles							
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
_PG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

Summary tables contain data reported by state a	Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	9	8	6	7	5		
Miles Traveled - Gasoline Vehicles	140,036	105,882	104,393	36,489	84,341		
Gas Use (gallons) - Gasoline Vehicles	4,630	4,349	3,614	1,952	3,006		
Gasoline Cost - Gasoline Vehicles	\$5,496	\$4,642	\$3,794	\$2,113	\$4,514		
Gasoline Cost per Gallon	\$1.19	\$1.07	\$1.05	\$1.08	\$1.50		
Maintenance Cost - Gasoline Vehicles	\$2,850	\$3,137	\$3,046	\$881	\$626		
Maint. Cost per Mile - Gasoline Vehicles	\$0.020	\$0.030	\$0.029	\$0.024	\$0.007		
Number of Vehicles - Passenger Cars	8	7	5	5	4		
Miles Traveled - Passenger Cars	128,875	93,083	90,047	21,282	69,611		
Miles Traveled per Passenger Car	16,109	13,298	18,009	4,256	17,403		
Gas Use (gallons) - Passenger Cars	4,072	3,710	2,897	1,108	2,430		
Miles per Gallon - Passenger Cars	31.6	25.1	31.1	19.2	28.6		
Gasoline Cost - Passenger Cars	\$4,838	\$3,895	\$3,041	\$1,163	\$3,649		
Maintenance Cost - Passenger Cars	\$2,526	\$2,631	\$2,743	\$520	\$447		
Maint. Cost per Mile - Passenger Cars	\$0.020	\$0.028	\$0.030	\$0.024	\$0.006		
Number of Vehicles - Light Trucks	1	1	1	2	1		
Miles Traveled - Light Trucks	11,161	12,799	14,346	15,207	14,730		
Miles Traveled per Light Truck	11,161	12,799	14,346	7,604	14,730		
Gas Use (gallons) - Light Trucks	558	639	717	844	576		
Miles per Gallon - Light Trucks	20.0	20.0	20.0	18.0	25.6		
Gasoline Cost - Light Trucks	\$658	\$747	\$753	\$949	\$865		
Maintenance Cost - Light Trucks	\$324	\$506	\$303	\$361	\$179		
Maint. Cost per Mile - Light Trucks	\$0.029	\$0.040	\$0.021	\$0.024	\$0.012		
Number of Vehicles - Diesel Vehicles							
Miles Traveled - Diesel Vehicles							
Miles Traveled per Diesel Vehicle							
Diesel Fuel Use (GGE) - Diesel Vehicles							
Diesel Fuel Cost - Diesel Vehicles							
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles							
Maint. Cost per Mile - Diesel Vehicles							
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	0	0	0	0	0		
Number of Exempted Vehicles	0	0	0	0	0		
CFV Acquisitions - Only New CFVs		1	0	0	0		
CFVs, AFVs and Exempted Vehicles	9	10	8	16	10		

	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs		2	2	9	5		
Miles Traveled - AFVs		35,475	46,398	229,762	75,193		
Gas Fuel Use (gallons) - AFVs		1,144	1,271	7,411	2,856		
Alt. Fuel Use (GGE) - AFVs		0	0	0	0		
Percent Alt. Fuel Use in AFVs		0	0	0	0		
Alt. Fuel Cost - AFVs		0	0	0	0		
Maintenance Cost - AFVs		\$1,179	\$850	\$1,398	\$3,613		
AFV Acquisitions - Only New AFVs		2	0	0	0		
Percent AFVs of New Acquisitions		67%	0	0	0		
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles		2	2	9	5		
Miles Traveled - E85 Vehicles		35,475	46,398	229,762	75,193		
Miles Traveled per E85 Vehicle		17,738	23,199	25,529	15,039		
Gas Fuel Use (gallons) - E85 Vehicles		1,144	1,271	7,411	2,856		
E85 Fuel Use (GGE) - E85 Vehicles		0	0	0	0		
E85 Fuel Cost - E85 Vehicles		0	0	0	0		
E85 Fuel Cost per GGE		0	0	0	0		
Maintenance Cost - E85 Vehicles		\$1,179	\$850	\$1,398	\$3,613		
Maint. Cost per Mile - E85 Vehicles		\$0.0332	\$0.0183	\$0.0061	\$0.0480		
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	6	7	8	5	5		
Miles Traveled - Gasoline Vehicles	69,216	88,782	86,230	54,001	45,272		
Gas Use (gallons) - Gasoline Vehicles	2,769	3,465	3,243	1,939	1,743		
Gasoline Cost - Gasoline Vehicles	\$3,345	\$3,580	\$2,959	\$2,462	\$2,559		
Gasoline Cost per Gallon	\$1.21	\$1.03	\$0.91	\$1.27	\$1.47		
Maintenance Cost - Gasoline Vehicles	\$2,185	\$745	\$2,150	\$1,492	\$705		
Maint. Cost per Mile - Gasoline Vehicles	\$0.032	\$0.008	\$0.025	\$0.028	\$0.016		
Number of Vehicles - Passenger Cars	6	7	8	5	5		
Miles Traveled - Passenger Cars	69,216	88,782	86,230	54,001	45,272		
Miles Traveled per Passenger Car	11,536	12,683	10,779	10,800	9,054		
Gas Use (gallons) - Passenger Cars	2,769	3,465	3,243	1,939	1,743		
Miles per Gallon - Passenger Cars	25.0	25.6	26.6	27.8	26.0		
Gasoline Cost - Passenger Cars	\$3,345	\$3,580	\$2,959	\$2,462	\$2,559		
Maintenance Cost - Passenger Cars	\$2,185	\$745	\$2,150	\$1,492	\$705		
Maint. Cost per Mile - Passenger Cars	\$0.032	\$0.008	\$0.025	\$0.028	\$0.016		
Number of Vehicles - Light Trucks							
Miles Traveled - Light Trucks							
Miles Traveled per Light Truck							
Gas Use (gallons) - Light Trucks							
Miles per Gallon - Light Trucks							
Gasoline Cost - Light Trucks							
Maintenance Cost - Light Trucks							
Maint. Cost per Mile - Light Trucks							
Number of Vehicles - Diesel Vehicles							
Miles Traveled - Diesel Vehicles							
Miles Traveled per Diesel Vehicle							
Diesel Fuel Use (GGE) - Diesel Vehicles							
Diesel Fuel Cost - Diesel Vehicles							
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles							
Maint. Cost per Mile - Diesel Vehicles							
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	0	0	0	0	0		
Number of Exempted Vehicles	0	0	1	0	0		
CFV Acquisitions - Only New CFVs		0	0	0	0		
CFVs, AFVs and Exempted Vehicles	6	7	10	6	8		

Alternative Fuel Vehicles (AFVs)	Fiscal Year						
	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs			1	1	3		
Miles Traveled - AFVs			18,756	5,861	22,826		
Gas Fuel Use (gallons) - AFVs			607	243	900		
Alt. Fuel Use (GGE) - AFVs			0	0	0		
Percent Alt. Fuel Use in AFVs			0	0	0		
Alt. Fuel Cost - AFVs			0	0	0		
Maintenance Cost - AFVs			\$180	\$84	\$43		
AFV Acquisitions - Only New AFVs		1	0	0	2		
Percent AFVs of New Acquisitions		100%	0	0	100%		
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles			1	1	3		
Miles Traveled - E85 Vehicles			18,756	5,861	22,826		
Miles Traveled per E85 Vehicle			18,756	5,861	7,609		
Gas Fuel Use (gallons) - E85 Vehicles			607	243	900		
E85 Fuel Use (GGE) - E85 Vehicles			0	0	0		
E85 Fuel Cost - E85 Vehicles			0	0	0		
E85 Fuel Cost per GGE			0	0	0		
Maintenance Cost - E85 Vehicles			\$180	\$84	\$43		
Maint. Cost per Mile - E85 Vehicles			\$0.0096	\$0.0143	\$0.0019		
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles		l					

CFV Summary TableDepartment of Labor & Industrial Relations
Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

Cummary tubies comain data reported by state to	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	32	31	31	28	27		
Miles Traveled - Gasoline Vehicles	505,968	521,364	413,704	334,151	364,001		
Gas Use (gallons) - Gasoline Vehicles	27,945	25,820	20,246	15,862	17,406		
Gasoline Cost - Gasoline Vehicles	\$32,254	\$27,776	\$19,520	\$20,392	\$25,396		
Gasoline Cost per Gallon	\$1.15	\$1.08	\$0.96	\$1.29	\$1.46		
Maintenance Cost - Gasoline Vehicles	\$26,289	\$20,485	\$14,606	\$15,798	\$6,569		
Maint. Cost per Mile - Gasoline Vehicles	\$0.052	\$0.039	\$0.035	\$0.047	\$0.018		
Number of Vehicles - Passenger Cars	12	12	13	11	10		
Miles Traveled - Passenger Cars	129,222	143,869	159,705	78,637	120,644		
Miles Traveled per Passenger Car	10,769	11,989	12,285	7,149	12,064		
Gas Use (gallons) - Passenger Cars	6,342	6,031	6,860	3,114	5,146		
Miles per Gallon - Passenger Cars	20.4	23.9	23.3	25.3	23.4		
Gasoline Cost - Passenger Cars	\$7,191	\$6,443	\$6,722	\$4,136	\$7,683		
Maintenance Cost - Passenger Cars	\$5,060	\$4,360	\$4,727	\$2,447	\$3,044		
Maint. Cost per Mile - Passenger Cars	\$0.039	\$0.030	\$0.030	\$0.031	\$0.025		
Number of Vehicles - Light Trucks	17	19	18	17	17		
Miles Traveled - Light Trucks	345,242	377,495	253,999	255,514	243,357		
Miles Traveled per Light Truck	20,308	19,868	14,111	15,030	14,315		
Gas Use (gallons) - Light Trucks	17,652	19,789	13,386	12,748	12,260		
Miles per Gallon - Light Trucks	19.6	19.1	19.0	20.0	19.8		
Gasoline Cost - Light Trucks	\$20,568	\$21,333	\$12,798	\$16,256	\$17,713		
Maintenance Cost - Light Trucks	\$20,255	\$16,125	\$9,879	\$13,351	\$3,525		
Maint. Cost per Mile - Light Trucks	\$0.059	\$0.043	\$0.039	\$0.052	\$0.014		
Number of Vehicles - Diesel Vehicles	1						
Miles Traveled - Diesel Vehicles	17,803						
Miles Traveled per Diesel Vehicle	17,803						
Diesel Fuel Use (GGE) - Diesel Vehicles	2,274						
Diesel Fuel Cost - Diesel Vehicles	\$2,018						
B20 Fuel Use (GGE) - Diesel Vehicles	0						
B20 Fuel Cost - Diesel Vehicles	0						
Maintenance Cost - Diesel Vehicles	\$2,072						
Maint. Cost per Mile - Diesel Vehicles	\$0.116						
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	3	0	0	0	0		
Number of Exempted Vehicles	0	3	3	3	2		
CFV Acquisitions - Only New CFVs		1	4	2	1		
CFVs, AFVs and Exempted Vehicles	33	34	34	34	34		

AFV Summary Table Department of Labor & Industrial Relations Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

and specific by state	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs				3	5		
Miles Traveled - AFVs				53,559	41,291		
Gas Fuel Use (gallons) - AFVs				2,189	1,776		
Alt. Fuel Use (GGE) - AFVs				0	0		
Percent Alt. Fuel Use in AFVs				0	0		
Alt. Fuel Cost - AFVs				0	0		
Maintenance Cost - AFVs				\$2,100	\$716		
AFV Acquisitions - Only New AFVs		1	0	1	2		
Percent AFVs of New Acquisitions		50%	0	33%	67%		
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles				3	5		
Miles Traveled - E85 Vehicles				53,559	41,291		
Miles Traveled per E85 Vehicle				17,853	8,258		
Gas Fuel Use (gallons) - E85 Vehicles				2,189	1,776		
E85 Fuel Use (GGE) - E85 Vehicles				0	0		
E85 Fuel Cost - E85 Vehicles				0	0		
E85 Fuel Cost per GGE				0	0		
Maintenance Cost - E85 Vehicles				\$2,100	\$716		
Maint. Cost per Mile - E85 Vehicles				\$0.0392	\$0.0173		
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year					
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - Gasoline Vehicles	513	692	699	662	659	
Miles Traveled - Gasoline Vehicles	5,574,774	6,703,496	6,690,887	6,462,710	6,117,332	
Gas Use (gallons) - Gasoline Vehicles	302,646	340,400	338,223	339,722	316,042	
Gasoline Cost - Gasoline Vehicles	\$313,258	\$343,621	\$307,031	\$404,445	\$444,196	
Gasoline Cost per Gallon	\$1.04	\$1.01	\$0.91	\$1.19	\$1.41	
Maintenance Cost - Gasoline Vehicles	\$148,003	\$252,303	\$307,735	\$249,865	\$282,370	
Maint. Cost per Mile - Gasoline Vehicles	\$0.027	\$0.038	\$0.046	\$0.039	\$0.046	
Number of Vehicles - Passenger Cars	220	356	364	357	339	
Miles Traveled - Passenger Cars	3,432,681	3,804,622	4,034,987	4,042,876	3,876,279	
Miles Traveled per Passenger Car	15,603	10,687	11,085	11,325	11,434	
Gas Use (gallons) - Passenger Cars	144,482	154,172	165,871	171,282	165,611	
Miles per Gallon - Passenger Cars	23.8	24.7	24.3	23.6	23.4	
Gasoline Cost - Passenger Cars	\$156,357	\$159,256	\$149,636	\$203,945	\$225,408	
Maintenance Cost - Passenger Cars	\$65,608	\$115,621	\$144,823	\$131,976	\$123,084	
Maint. Cost per Mile - Passenger Cars	\$0.019	\$0.030	\$0.036	\$0.033	\$0.032	
Number of Vehicles - Light Trucks	256	309	303	283	300	
Miles Traveled - Light Trucks	2,061,713	2,754,487	2,518,590	2,299,896	2,166,375	
Miles Traveled per Light Truck	8,054	8,914	8,312	8,127	7,221	
Gas Use (gallons) - Light Trucks	140,080	166,125	154,628	154,136	141,401	
Miles per Gallon - Light Trucks	14.7	16.6	16.3	14.9	15.3	
Gasoline Cost - Light Trucks	\$140,516	\$164,926	\$140,317	\$182,728	\$206,678	
Maintenance Cost - Light Trucks	\$72,802	\$125,089	\$149,213	\$107,363	\$147,677	
Maint. Cost per Mile - Light Trucks	\$0.035	\$0.045	\$0.059	\$0.047	\$0.068	
Number of Vehicles - Diesel Vehicles	14	15	14	13	7	
Miles Traveled - Diesel Vehicles	56,895	85,398	98,515	59,835	42,400	
Miles Traveled per Diesel Vehicle	4,064	5,693	7,037	4,603	6,057	
Diesel Fuel Use (GGE) - Diesel Vehicles	7,917	12,985	12,939	7,539	5,768	
Diesel Fuel Cost - Diesel Vehicles	\$6,306	\$9,500	\$9,104	\$8,120	\$6,839	
B20 Fuel Use (GGE) - Diesel Vehicles	0	0	0	0	0	
B20 Fuel Cost - Diesel Vehicles	0	0	0	0	0	
Maintenance Cost - Diesel Vehicles	\$6,187	\$13,364	\$14,548	\$2,593	\$2,765	
Maint. Cost per Mile - Diesel Vehicles	\$0.109	\$0.156	\$0.148	\$0.043	\$0.065	
Number of Gasoline Buses	6	7	7	6	6	
Number of Gasoline Truck Others	31	20	25	16	14	
Number of Exempted Vehicles	16	104	106	310	249	
CFV Acquisitions - Only New CFVs		47	52	31	25	
CFVs, AFVs and Exempted Vehicles	550	835	839	1,050	1,006	

	Fiscal Year					
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - AFVs	7	24	20	65	91	
Miles Traveled - AFVs	14,618	171,138	137,487	904,901	1,397,931	
Gas Fuel Use (gallons) - AFVs	705	6,646	5,467	36,026	55,915	
Alt. Fuel Use (GGE) - AFVs	0	0	0	0	288	
Percent Alt. Fuel Use in AFVs	0	0	0	0	1%	
Alt. Fuel Cost - AFVs	0	0	0	0	\$509	
Maintenance Cost - AFVs	\$728	\$917	\$3,858	\$17,873	\$27,498	
AFV Acquisitions - Only New AFVs		6	5	15	16	
Percent AFVs of New Acquisitions		11%	9%	33%	39%	
Number of Vehicles - CNG Vehicles						
Miles Traveled - CNG Vehicles						
Miles Traveled per CNG Vehicle						
Gas Fuel Use (gallons) - CNG Vehicles						
CNG Fuel Use (GGE) - CNG Vehicles						
CNG Fuel Cost - CNG Vehicles						
CNG Fuel Cost per GGE						
Maintenance Cost - CNG Vehicles						
Maint. Cost per Mile - CNG Vehicles						
Number of Vehicles - E85 Vehicles	7	24	20	65	91	
Miles Traveled - E85 Vehicles	14,618	171,138	137,487	904,901	1,397,931	
Miles Traveled per E85 Vehicle	2,088	7,131	6,874	13,922	15,362	
Gas Fuel Use (gallons) - E85 Vehicles	705	6,646	5,467	36,026	55,915	
E85 Fuel Use (GGE) - E85 Vehicles	0	0	0	0	288	
E85 Fuel Cost - E85 Vehicles	0	0	0	0	\$509	
E85 Fuel Cost per GGE	0	0	0	0	\$1.77	
Maintenance Cost - E85 Vehicles	\$728	\$917	\$3,858	\$17,873	\$27,498	
Maint. Cost per Mile - E85 Vehicles	\$0.0498	\$0.0054	\$0.0281	\$0.0198	\$0.0197	
Number of Vehicles - LPG Vehicles						
Miles Traveled - LPG Vehicles						
Miles Traveled per LPG Vehicle						
Gas Fuel Use (gallons) - LPG Vehicles						
LPG Fuel Use (GGE) - LPG Vehicles						
LPG Fuel Cost - LPG Vehicles						
LPG Fuel Cost per GGE						
Maintenance Cost - LPG Vehicles						
Maint. Cost per Mile - LPG Vehicles						

Summary tables contain data reported by state	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	265	241	234	247	256		
Miles Traveled - Gasoline Vehicles	3,044,324	3,058,141	3,439,851	3,181,051	3,106,576		
Gas Use (gallons) - Gasoline Vehicles	151,000	150,998	179,798	160,567	164,765		
Gasoline Cost - Gasoline Vehicles	\$166,420	\$154,557	\$157,726	\$198,627	\$228,193		
Gasoline Cost per Gallon	\$1.10	\$1.02	\$0.88	\$1.24	\$1.38		
Maintenance Cost - Gasoline Vehicles	\$74,618	\$103,815	\$84,079	\$76,267	\$77,005		
Maint. Cost per Mile - Gasoline Vehicles	\$0.025	\$0.034	\$0.024	\$0.024	\$0.025		
Number of Vehicles - Passenger Cars	116	103	78	69	73		
Miles Traveled - Passenger Cars	1,517,789	1,393,981	1,557,008	991,909	947,391		
Miles Traveled per Passenger Car	13,084	13,534	19,962	14,375	12,978		
Gas Use (gallons) - Passenger Cars	58,666	53,893	67,757	36,268	37,926		
Miles per Gallon - Passenger Cars	25.9	25.9	23.0	27.3	25.0		
Gasoline Cost - Passenger Cars	\$64,464	\$54,951	\$54,992	\$45,992	\$49,601		
Maintenance Cost - Passenger Cars	\$31,908	\$45,217	\$32,225	\$26,835	\$20,594		
Maint. Cost per Mile - Passenger Cars	\$0.021	\$0.032	\$0.021	\$0.027	\$0.022		
Number of Vehicles - Light Trucks	143	130	151	175	181		
Miles Traveled - Light Trucks	1,514,701	1,610,119	1,850,491	2,158,079	2,136,283		
Miles Traveled per Light Truck	10,592	12,386	12,255	12,332	11,803		
Gas Use (gallons) - Light Trucks	90,656	91,659	109,174	121,487	125,187		
Miles per Gallon - Light Trucks	16.7	17.6	16.9	17.8	17.1		
Gasoline Cost - Light Trucks	\$100,216	\$94,215	\$100,287	\$149,045	\$176,256		
Maintenance Cost - Light Trucks	\$41,033	\$57,758	\$49,671	\$48,919	\$56,085		
Maint. Cost per Mile - Light Trucks	\$0.027	\$0.036	\$0.027	\$0.023	\$0.026		
Number of Vehicles - Diesel Vehicles				1			
Miles Traveled - Diesel Vehicles				8,987			
Miles Traveled per Diesel Vehicle				8,987			
Diesel Fuel Use (GGE) - Diesel Vehicles				866			
Diesel Fuel Cost - Diesel Vehicles				\$719			
B20 Fuel Use (GGE) - Diesel Vehicles				0			
B20 Fuel Cost - Diesel Vehicles				0			
Maintenance Cost - Diesel Vehicles				\$118			
Maint. Cost per Mile - Diesel Vehicles				\$0.013			
Number of Gasoline Buses	3	3	3	0	0		
Number of Gasoline Truck Others	3	5	2	3	2		
Number of Exempted Vehicles	398	359	353	306	415		
CFV Acquisitions - Only New CFVs		20	23	23	25		
CFVs, AFVs and Exempted Vehicles	780	731	745	725	876		

	Fiscal Year					
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001*	
Number of Vehicles - AFVs	117	131	158	171	205	
Miles Traveled - AFVs	1,908,243	2,037,481	2,115,764	2,484,630	2,423,412	
Gas Fuel Use (gallons) - AFVs	73,255	77,976	75,166	87,733	84,568	
Alt. Fuel Use (GGE) - AFVs	15,956	16,135	25,587	21,122	24,989	
Percent Alt. Fuel Use in AFVs	18%	17%	25%	19%	23%	
Alt. Fuel Cost - AFVs	\$18,298	\$18,096	\$21,383	\$21,655	\$39,637	
Maintenance Cost - AFVs	\$32,888	\$64,647	\$61,153	\$61,316	\$54,769	
AFV Acquisitions - Only New AFVs		10	40	26	45	
Percent AFVs of New Acquisitions		33%	63%	53%	64%	
Number of Vehicles - CNG Vehicles	10	10	14	14	14	
Miles Traveled - CNG Vehicles	111,369	104,606	114,591	179,993	143,782	
Miles Traveled per CNG Vehicle	11,137	10,461	8,185	12,857	10,270	
Gas Fuel Use (gallons) - CNG Vehicles	2,855	2,779	3,188	4,252	3,533	
CNG Fuel Use (GGE) - CNG Vehicles	2,179	2,018	2,038	3,641	2,810	
CNG Fuel Cost - CNG Vehicles	\$1,027	\$770	\$880	\$2,161	\$1,866	
CNG Fuel Cost per GGE	\$0.47	\$0.38	\$0.43	\$0.59	\$0.66	
Maintenance Cost - CNG Vehicles	\$2,426	\$11,150	\$10,380	\$10,470	\$5,658	
Maint. Cost per Mile - CNG Vehicles	\$0.0218	\$0.1066	\$0.0906	\$0.0582	\$0.0394	
Number of Vehicles - E85 Vehicles	38	50	80	95	133	
Miles Traveled - E85 Vehicles	807,767	984,970	1,119,507	1,530,098	1,758,587	
Miles Traveled per E85 Vehicle	21,257	19,699	13,994	16,106	13,222	
Gas Fuel Use (gallons) - E85 Vehicles	27,947	33,001	37,441	52,962	56,656	
E85 Fuel Use (GGE) - E85 Vehicles	1,957	2,995	5,990	4,411	12,354	
E85 Fuel Cost - E85 Vehicles	\$3,451	\$6,916	\$7,896	\$8,517	\$26,488	
E85 Fuel Cost per GGE	\$1.76	\$2.31	\$1.32	\$1.93	\$2.14	
Maintenance Cost - E85 Vehicles	\$10,428	\$29,087	\$20,772	\$23,513	\$27,902	
Maint. Cost per Mile - E85 Vehicles	\$0.0129	\$0.0295	\$0.0186	\$0.0154	\$0.0159	
Number of Vehicles - LPG Vehicles	69	71	64	62	57	
Miles Traveled - LPG Vehicles	989,107	947,905	881,666	774,539	521,040	
Miles Traveled per LPG Vehicle	14,335	13,351	13,776	12,493	9,141	
Gas Fuel Use (gallons) - LPG Vehicles	42,454	42,196	34,537	30,518	24,379	
LPG Fuel Use (GGE) - LPG Vehicles	11,820	11,122	17,559	13,070	9,744	
LPG Fuel Cost - LPG Vehicles	\$13,820	\$10,409	\$12,608	\$10,977	\$11,093	
LPG Fuel Cost per GGE	\$1.17	\$0.94	\$0.72	\$0.84	\$1.14	
Maintenance Cost - LPG Vehicles	\$20,034	\$24,410	\$30,002	\$27,334	\$21,209	
Maint. Cost per Mile - LPG Vehicles	\$0.0203	\$0.0258	\$0.0340	\$0.0353	\$0.0407	

^{*}Also included in the AFV totals are electric use data.

Summary tables contain data reported by state to	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year					
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - Gasoline Vehicles	56	71	65	71	111	
Miles Traveled - Gasoline Vehicles	694,455	978,012	796,978	616,902	1,179,630	
Gas Use (gallons) - Gasoline Vehicles	44,235	48,473	42,192	37,015	61,834	
Gasoline Cost - Gasoline Vehicles	\$50,911	\$49,392	\$39,847	\$46,227	\$86,437	
Gasoline Cost per Gallon	\$1.15	\$1.02	\$0.94	\$1.25	\$1.40	
Maintenance Cost - Gasoline Vehicles	\$31,028	\$29,994	\$23,521	\$32,416	\$48,050	
Maint. Cost per Mile - Gasoline Vehicles	\$0.045	\$0.031	\$0.030	\$0.053	\$0.041	
Number of Vehicles - Passenger Cars	22	34	19	15	49	
Miles Traveled - Passenger Cars	455,735	724,202	437,325	192,871	712,896	
Miles Traveled per Passenger Car	20,715	21,300	23,017	12,858	14,549	
Gas Use (gallons) - Passenger Cars	24,703	33,024	18,153	7,611	29,156	
Miles per Gallon - Passenger Cars	18.4	21.9	24.1	25.3	24.5	
Gasoline Cost - Passenger Cars	\$28,717	\$33,425	\$16,890	\$9,781	\$38,615	
Maintenance Cost - Passenger Cars	\$17,827	\$16,871	\$3,743	\$2,813	\$31,076	
Maint. Cost per Mile - Passenger Cars	\$0.039	\$0.023	\$0.009	\$0.015	\$0.044	
Number of Vehicles - Light Trucks	29	31	39	46	51	
Miles Traveled - Light Trucks	199,238	226,289	324,963	389,440	436,063	
Miles Traveled per Light Truck	6,870	7,300	8,332	8,466	8,550	
Gas Use (gallons) - Light Trucks	14,285	12,209	19,251	24,188	27,612	
Miles per Gallon - Light Trucks	13.9	18.5	16.9	16.1	15.8	
Gasoline Cost - Light Trucks	\$15,875	\$12,566	\$18,489	\$29,861	\$39,815	
Maintenance Cost - Light Trucks	\$10,813	\$9,076	\$9,545	\$21,793	\$11,390	
Maint. Cost per Mile - Light Trucks	\$0.054	\$0.040	\$0.029	\$0.056	\$0.026	
Number of Vehicles - Diesel Vehicles	3	2	2	2	2	
Miles Traveled - Diesel Vehicles	3,572	5,941	2,392	1,201	2,108	
Miles Traveled per Diesel Vehicle	1,191	2,971	1,196	601	1,054	
Diesel Fuel Use (GGE) - Diesel Vehicles	578	816	291	74	216	
Diesel Fuel Cost - Diesel Vehicles	\$523	\$739	\$270	\$81	\$254	
B20 Fuel Use (GGE) - Diesel Vehicles	0	0	0	0	0	
B20 Fuel Cost - Diesel Vehicles	0	0	0	0	0	
Maintenance Cost - Diesel Vehicles	\$1,471	\$1,103	\$810	\$174	\$227	
Maint. Cost per Mile - Diesel Vehicles	\$0.412	\$0.186	\$0.339	\$0.145	\$0.108	
Number of Gasoline Buses	5	5	6	7	8	
Number of Gasoline Truck Others	0	1	1	3	3	
Number of Exempted Vehicles	1,332	1,287	1,329	1,393	1,440	
CFV Acquisitions - Only New CFVs		3	9	22	12	
CFVs, AFVs and Exempted Vehicles	1,391	1,360	1,412	1,485	1,578	

	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs			16	19	25		
Miles Traveled - AFVs			94,128	435,174	474,129		
Gas Fuel Use (gallons) - AFVs			2,081	18,487	19,924		
Alt. Fuel Use (GGE) - AFVs			1,419	349	509		
Percent Alt. Fuel Use in AFVs			41%	2%	2%		
Alt. Fuel Cost - AFVs			\$2,100	\$651	\$940		
Maintenance Cost - AFVs			\$1,115	\$6,595	\$9,192		
AFV Acquisitions - Only New AFVs		3	9	16	0		
Percent AFVs of New Acquisitions		50%	50%	42%	0		
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles			16	19	25		
Miles Traveled - E85 Vehicles			94,128	435,174	474,129		
Miles Traveled per E85 Vehicle			5,883	22,904	18,965		
Gas Fuel Use (gallons) - E85 Vehicles			2,081	18,487	19,924		
E85 Fuel Use (GGE) - E85 Vehicles			1,419	349	509		
E85 Fuel Cost - E85 Vehicles			\$2,100	\$651	\$940		
E85 Fuel Cost per GGE			\$1.48	\$1.87	\$1.85		
Maintenance Cost - E85 Vehicles			\$1,115	\$6,595	\$9,192		
Maint. Cost per Mile - E85 Vehicles			\$0.0118	\$0.0152	\$0.0194		
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent Fiscal Year					
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - Gasoline Vehicles	54	44	38	43	26	
Miles Traveled - Gasoline Vehicles	907,469	879,449	715,723	483,558	291,901	
Gas Use (gallons) - Gasoline Vehicles	36,358	36,680	29,607	21,324	13,882	
Gasoline Cost - Gasoline Vehicles	\$37,324	\$33,487	\$23,243	\$23,222	\$17,644	
Gasoline Cost per Gallon	\$1.03	\$0.91	\$0.79	\$1.09	\$1.27	
Maintenance Cost - Gasoline Vehicles	\$27,828	\$16,584	\$14,056	\$12,944	\$10,581	
Maint. Cost per Mile - Gasoline Vehicles	\$0.031	\$0.019	\$0.020	\$0.027	\$0.036	
Number of Vehicles - Passenger Cars	42	32	25	25	10	
Miles Traveled - Passenger Cars	622,992	550,983	389,257	194,222	80,013	
Miles Traveled per Passenger Car	14,833	17,218	15,570	7,769	8,001	
Gas Use (gallons) - Passenger Cars	22,903	21,129	14,479	7,536	3,125	
Miles per Gallon - Passenger Cars	27.2	26.1	26.9	25.8	25.6	
Gasoline Cost - Passenger Cars	\$23,323	\$19,139	\$11,347	\$7,968	\$3,955	
Maintenance Cost - Passenger Cars	\$18,194	\$12,919	\$10,104	\$5,920	\$2,609	
Maint. Cost per Mile - Passenger Cars	\$0.029	\$0.023	\$0.026	\$0.030	\$0.033	
Number of Vehicles - Light Trucks	12	12	13	18	16	
Miles Traveled - Light Trucks	284,477	328,466	326,466	289,336	211,888	
Miles Traveled per Light Truck	23,706	27,372	25,113	16,074	13,243	
Gas Use (gallons) - Light Trucks	13,456	15,552	15,128	13,788	10,757	
Miles per Gallon - Light Trucks	21.1	21.1	21.6	21.0	19.7	
Gasoline Cost - Light Trucks	\$14,001	\$14,348	\$11,896	\$15,255	\$13,689	
Maintenance Cost - Light Trucks	\$9,634	\$3,665	\$3,952	\$7,024	\$7,972	
Maint. Cost per Mile - Light Trucks	\$0.034	\$0.011	\$0.012	\$0.024	\$0.038	
Number of Vehicles - Diesel Vehicles						
Miles Traveled - Diesel Vehicles						
Miles Traveled per Diesel Vehicle						
Diesel Fuel Use (GGE) - Diesel Vehicles						
Diesel Fuel Cost - Diesel Vehicles						
B20 Fuel Use (GGE) - Diesel Vehicles						
B20 Fuel Cost - Diesel Vehicles						
Maintenance Cost - Diesel Vehicles						
Maint. Cost per Mile - Diesel Vehicles						
Number of Gasoline Buses	0	0	0	0	0	
Number of Gasoline Truck Others	0	0	0	0	0	
Number of Exempted Vehicles	2	2	2	2	4	
CFV Acquisitions - Only New CFVs		7	0	4	0	
CFVs, AFVs and Exempted Vehicles	57	54	55	79	73	

	Fiscal Year					
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - AFVs	1	8	15	34	43	
Miles Traveled - AFVs	12,176	153,855	271,219	540,699	666,901	
Gas Fuel Use (gallons) - AFVs	406	3,580	8,980	20,178	27,031	
Alt. Fuel Use (GGE) - AFVs	383	2,570	1,512	1,104	934	
Percent Alt. Fuel Use in AFVs	49%	42%	14%	5%	3%	
Alt. Fuel Cost - AFVs	\$346	\$3,181	\$2,118	\$2,185	\$2,224	
Maintenance Cost - AFVs	\$872	\$3,701	\$4,000	\$10,436	\$14,205	
AFV Acquisitions - Only New AFVs		7	14	16	6	
Percent AFVs of New Acquisitions		50%	100%	80%	100%	
Number of Vehicles - CNG Vehicles						
Miles Traveled - CNG Vehicles						
Miles Traveled per CNG Vehicle						
Gas Fuel Use (gallons) - CNG Vehicles						
CNG Fuel Use (GGE) - CNG Vehicles						
CNG Fuel Cost - CNG Vehicles						
CNG Fuel Cost per GGE						
Maintenance Cost - CNG Vehicles						
Maint. Cost per Mile - CNG Vehicles						
Number of Vehicles - E85 Vehicles		7	14	33	42	
Miles Traveled - E85 Vehicles		139,951	263,592	531,530	658,279	
Miles Traveled per E85 Vehicle		19,993	18,828	16,107	15,673	
Gas Fuel Use (gallons) - E85 Vehicles		3,231	8,596	19,582	26,464	
E85 Fuel Use (GGE) - E85 Vehicles		1,921	1,480	1,093	934	
E85 Fuel Cost - E85 Vehicles		\$2,758	\$2,100	\$2,167	\$2,224	
E85 Fuel Cost per GGE		\$1.44	\$1.42	\$1.98	\$2.38	
Maintenance Cost - E85 Vehicles		\$2,644	\$3,333	\$9,898	\$13,081	
Maint. Cost per Mile - E85 Vehicles		\$0.0189	\$0.0126	\$0.0186	\$0.0199	
Number of Vehicles - LPG Vehicles	1	1	1	1	1	
Miles Traveled - LPG Vehicles	12,176	13,904	7,627	9,169	8,622	
Miles Traveled per LPG Vehicle	12,176	13,904	7,627	9,169	8,622	
Gas Fuel Use (gallons) - LPG Vehicles	406	349	384	596	567	
LPG Fuel Use (GGE) - LPG Vehicles	383	649	32	11	0	
LPG Fuel Cost - LPG Vehicles	\$346	\$423	\$17	\$18	0	
LPG Fuel Cost per GGE	\$0.90	\$0.65	\$0.53	\$1.64	0	
Maintenance Cost - LPG Vehicles	\$872	\$1,057	\$667	\$537	\$1,124	
Maint. Cost per Mile - LPG Vehicles	\$0.0716	\$0.0760	\$0.0875	\$0.0586	\$0.1304	

Summary tables contain data reported by state a	Fiscal Year					
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - Gasoline Vehicles	349	366	263	147	124	
Miles Traveled - Gasoline Vehicles	4,345,617	3,757,779	3,412,806	1,788,439	1,659,380	
Gas Use (gallons) - Gasoline Vehicles	202,787	185,204	167,367	89,599	65,535	
Gasoline Cost - Gasoline Vehicles	\$239,408	\$199,037	\$156,391	\$113,907	\$95,089	
Gasoline Cost per Gallon	\$1.18	\$1.07	\$0.93	\$1.27	\$1.45	
Maintenance Cost - Gasoline Vehicles	\$132,089	\$128,332	\$103,858	\$93,864	\$47,032	
Maint. Cost per Mile - Gasoline Vehicles	\$0.030	\$0.034	\$0.030	\$0.052	\$0.028	
Number of Vehicles - Passenger Cars	196	195	114	88	87	
Miles Traveled - Passenger Cars	3,066,455	2,419,067	1,866,818	1,249,199	1,198,314	
Miles Traveled per Passenger Car	15,645	12,405	16,376	14,195	13,774	
Gas Use (gallons) - Passenger Cars	118,971	97,453	66,966	56,203	44,288	
Miles per Gallon - Passenger Cars	25.8	24.8	27.9	22.2	27.1	
Gasoline Cost - Passenger Cars	\$140,569	\$105,386	\$59,685	\$71,315	\$64,284	
Maintenance Cost - Passenger Cars	\$87,834	\$63,252	\$44,726	\$33,069	\$32,550	
Maint. Cost per Mile - Passenger Cars	\$0.029	\$0.026	\$0.024	\$0.026	\$0.027	
Number of Vehicles - Light Trucks	134	160	149	59	37	
Miles Traveled - Light Trucks	1,146,877	1,317,689	1,545,988	539,240	461,066	
Miles Traveled per Light Truck	8,559	8,236	10,376	9,140	12,461	
Gas Use (gallons) - Light Trucks	65,215	85,789	100,401	33,396	21,247	
Miles per Gallon - Light Trucks	17.6	15.4	15.4	16.1	21.7	
Gasoline Cost - Light Trucks	\$76,656	\$91,586	\$96,706	\$42,592	\$30,805	
Maintenance Cost - Light Trucks	\$37,678	\$59,746	\$59,132	\$60,795	\$14,482	
Maint. Cost per Mile - Light Trucks	\$0.033	\$0.045	\$0.038	\$0.113	\$0.031	
Number of Vehicles - Diesel Vehicles						
Miles Traveled - Diesel Vehicles						
Miles Traveled per Diesel Vehicle						
Diesel Fuel Use (GGE) - Diesel Vehicles						
Diesel Fuel Cost - Diesel Vehicles						
B20 Fuel Use (GGE) - Diesel Vehicles						
B20 Fuel Cost - Diesel Vehicles						
Maintenance Cost - Diesel Vehicles						
Maint. Cost per Mile - Diesel Vehicles						
Number of Gasoline Buses	1	1	0	0	0	
Number of Gasoline Truck Others	18	10	0	0	0	
Number of Exempted Vehicles	0	14	123	298	261	
CFV Acquisitions - Only New CFVs		55	39	0	4	
CFVs, AFVs and Exempted Vehicles	364	430	420	488	451	

	Fiscal Year					
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - AFVs	15	50	34	43	66	
Miles Traveled - AFVs	201,649	833,733	561,429	655,727	1,105,832	
Gas Fuel Use (gallons) - AFVs	7,432	30,102	19,681	27,574	40,179	
Alt. Fuel Use (GGE) - AFVs	0	242	203	177	391	
Percent Alt. Fuel Use in AFVs	0	1%	1%	1%	1%	
Alt. Fuel Cost - AFVs	0	\$376	\$280	\$359	\$856	
Maintenance Cost - AFVs	\$2,094	\$8,754	\$13,202	\$11,332	\$23,537	
AFV Acquisitions - Only New AFVs		11	5	7	1	
Percent AFVs of New Acquisitions		17%	11%	100%	20%	
Number of Vehicles - CNG Vehicles						
Miles Traveled - CNG Vehicles						
Miles Traveled per CNG Vehicle						
Gas Fuel Use (gallons) - CNG Vehicles						
CNG Fuel Use (GGE) - CNG Vehicles						
CNG Fuel Cost - CNG Vehicles						
CNG Fuel Cost per GGE						
Maintenance Cost - CNG Vehicles						
Maint. Cost per Mile - CNG Vehicles						
Number of Vehicles - E85 Vehicles	15	50	34	43	66	
Miles Traveled - E85 Vehicles	201,649	833,733	561,429	655,727	1,105,832	
Miles Traveled per E85 Vehicle	13,443	16,675	16,513	15,249	16,755	
Gas Fuel Use (gallons) - E85 Vehicles	7,432	30,102	19,681	27,574	40,179	
E85 Fuel Use (GGE) - E85 Vehicles	0	242	203	177	391	
E85 Fuel Cost - E85 Vehicles	0	\$376	\$280	\$359	\$856	
E85 Fuel Cost per GGE	0	\$1.55	\$1.38	\$2.03	\$2.19	
Maintenance Cost - E85 Vehicles	\$2,094	\$8,754	\$13,202	\$11,332	\$23,537	
Maint. Cost per Mile - E85 Vehicles	\$0.0104	\$0.0105	\$0.0235	\$0.0173	\$0.0213	
Number of Vehicles - LPG Vehicles						
Miles Traveled - LPG Vehicles						
Miles Traveled per LPG Vehicle						
Gas Fuel Use (gallons) - LPG Vehicles						
LPG Fuel Use (GGE) - LPG Vehicles						
LPG Fuel Cost - LPG Vehicles						
LPG Fuel Cost per GGE						
Maintenance Cost - LPG Vehicles						
Maint. Cost per Mile - LPG Vehicles						

	Fiscal Year					
Conventional Fuel Vehicles (CFVs)	1997 est	1998	1999	2000 est	2001 est	
Number of Vehicles - Gasoline Vehicles	357	345	327	269	324	
Miles Traveled - Gasoline Vehicles	4,919,229	4,666,352	4,456,835	4,123,973	3,868,933	
Gas Use (gallons) - Gasoline Vehicles	226,160	202,507	196,679	213,908	206,906	
Gasoline Cost - Gasoline Vehicles	\$192,235	\$158,331	\$131,549	\$263,287	\$291,741	
Gasoline Cost per Gallon	\$0.85	\$0.78	\$0.67	\$1.23	\$1.41	
Maintenance Cost - Gasoline Vehicles	\$170,629	\$183,130	\$152,518	\$170,496	\$141,983	
Maint. Cost per Mile - Gasoline Vehicles	\$0.035	\$0.039	\$0.034	\$0.041	\$0.037	
Number of Vehicles - Passenger Cars	280	268	249	200	226	
Miles Traveled - Passenger Cars	4,228,000	3,873,181	3,513,210	2,960,577	2,768,481	
Miles Traveled per Passenger Car	15,100	14,452	14,109	14,803	12,250	
Gas Use (gallons) - Passenger Cars	180,684	150,384	137,754	121,798	115,184	
Miles per Gallon - Passenger Cars	23.4	25.8	25.5	24.3	24.0	
Gasoline Cost - Passenger Cars	\$153,581	\$117,760	\$91,453	\$149,809	\$162,411	
Maintenance Cost - Passenger Cars	\$139,524	\$148,683	\$118,562	\$87,420	\$75,703	
Maint. Cost per Mile - Passenger Cars	\$0.033	\$0.038	\$0.034	\$0.030	\$0.027	
Number of Vehicles - Light Trucks	77	77	78	64	90	
Miles Traveled - Light Trucks	691,229	793,171	943,625	1,101,452	1,017,832	
Miles Traveled per Light Truck	8,977	10,301	12,098	17,210	11,309	
Gas Use (gallons) - Light Trucks	45,476	52,123	58,925	87,654	86,024	
Miles per Gallon - Light Trucks	15.2	15.2	16.0	12.6	11.8	
Gasoline Cost - Light Trucks	\$38,654	\$40,571	\$40,096	\$108,017	\$121,296	
Maintenance Cost - Light Trucks	\$31,105	\$34,447	\$33,956	\$80,740	\$63,653	
Maint. Cost per Mile - Light Trucks	\$0.045	\$0.043	\$0.036	\$0.073	\$0.063	
Number of Vehicles - Diesel Vehicles			1			
Miles Traveled - Diesel Vehicles			1,484			
Miles Traveled per Diesel Vehicle			1,484			
Diesel Fuel Use (GGE) - Diesel Vehicles			107			
Diesel Fuel Cost - Diesel Vehicles			\$72			
B20 Fuel Use (GGE) - Diesel Vehicles			0		1,152	
B20 Fuel Cost - Diesel Vehicles			0		\$1,276	
Maintenance Cost - Diesel Vehicles			\$72			
Maint. Cost per Mile - Diesel Vehicles			\$0.049			
Number of Gasoline Buses	0	0	0	0	0	
Number of Gasoline Truck Others	0	0	0	5	8	
Number of Exempted Vehicles	3,092	3,995	4,134	4,205	4,133	
CFV Acquisitions - Only New CFVs		19	18	3	45	
CFVs, AFVs and Exempted Vehicles	3,618	4,498	4,683	4,590	4,597	

	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000 est	2001 est		
Number of Vehicles - AFVs	169	158	222	116	140		
Miles Traveled - AFVs	1,116,242	3,782,362	5,266,536	1,707,795	1,754,573		
Gas Fuel Use (gallons) - AFVs	33,953	119,620	190,383	67,860	65,966		
Alt. Fuel Use (GGE) - AFVs	23,678	83,156	64,672	3,866	13,325		
Percent Alt. Fuel Use in AFVs	41%	41%	25%	5%	17%		
Alt. Fuel Cost - AFVs	\$10,793	\$61,853	\$39,062	\$2,242	\$11,353		
Maintenance Cost - AFVs	\$63,030	\$76,409	\$109,278	\$27,252	\$47,986		
AFV Acquisitions - Only New AFVs		32	96	31	19		
Percent AFVs of New Acquisitions		63%	84%	91%	30%		
Number of Vehicles - CNG Vehicles	50	37	34	18	16		
Miles Traveled - CNG Vehicles	718,200	666,570	1,195,472	239,768	181,373		
Miles Traveled per CNG Vehicle	14,364	18,015	35,161	13,320	11,336		
Gas Fuel Use (gallons) - CNG Vehicles	15,385	30,086	48,169	6,308	0		
CNG Fuel Use (GGE) - CNG Vehicles	21,690	11,758	29,791	3,866	12,650		
CNG Fuel Cost - CNG Vehicles	\$8,487	\$3,780	\$12,477	\$2,242	\$8,603		
CNG Fuel Cost per GGE	\$0.39	\$0.32	\$0.42	\$0.58	\$0.68		
Maintenance Cost - CNG Vehicles	\$52,638	\$24,014	\$37,410	\$7,504	\$5,003		
Maint. Cost per Mile - CNG Vehicles	\$0.0733	\$0.0360	\$0.0313	\$0.0313	\$0.0276		
Number of Vehicles - E85 Vehicles	103	109	180	98	124		
Miles Traveled - E85 Vehicles	264,000	2,248,229	3,624,294	1,468,027	1,558,280		
Miles Traveled per E85 Vehicle	2,563	20,626	20,135	14,980	12,567		
Gas Fuel Use (gallons) - E85 Vehicles	11,780	88,828	141,414	61,552	65,966		
E85 Fuel Use (GGE) - E85 Vehicles	0	0	0	0	675		
E85 Fuel Cost - E85 Vehicles	0	0	0	0	\$1,474		
E85 Fuel Cost per GGE	0	0	0	0	\$2.18		
Maintenance Cost - E85 Vehicles	\$7,524	\$19,825	\$42,716	\$19,748	\$42,509		
Maint. Cost per Mile - E85 Vehicles	\$0.0285	\$0.0088	\$0.0118	\$0.0135	\$0.0273		
Number of Vehicles - LPG Vehicles	16	12	8				
Miles Traveled - LPG Vehicles	134,042	867,563	446,770				
Miles Traveled per LPG Vehicle	8,378	72,297	55,846				
Gas Fuel Use (gallons) - LPG Vehicles	6,788	706	800				
LPG Fuel Use (GGE) - LPG Vehicles	1,988	71,397	34,881				
LPG Fuel Cost - LPG Vehicles	\$2,306	\$58,073	\$26,585				
LPG Fuel Cost per GGE	\$1.16	\$0.81	\$0.76				
Maintenance Cost - LPG Vehicles	\$2,868	\$32,570	\$29,151				
Maint. Cost per Mile - LPG Vehicles	\$0.0214	\$0.0375	\$0.0652				

Cummary tables contain data reported by state to	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	103	112	92	100	78		
Miles Traveled - Gasoline Vehicles	1,017,420	1,164,240	794,053	824,603	541,951		
Gas Use (gallons) - Gasoline Vehicles	48,314	52,562	40,236	41,951	31,854		
Gasoline Cost - Gasoline Vehicles	\$58,064	\$57,375	\$38,603	\$54,301	\$46,460		
Gasoline Cost per Gallon	\$1.20	\$1.09	\$0.96	\$1.29	\$1.46		
Maintenance Cost - Gasoline Vehicles	\$32,717	\$46,499	\$39,595	\$23,418	\$19,921		
Maint. Cost per Mile - Gasoline Vehicles	\$0.032	\$0.040	\$0.050	\$0.028	\$0.037		
Number of Vehicles - Passenger Cars	49	57	33	57	20		
Miles Traveled - Passenger Cars	655,647	771,895	365,373	460,226	171,829		
Miles Traveled per Passenger Car	13,381	13,542	11,072	8,074	8,591		
Gas Use (gallons) - Passenger Cars	24,250	27,150	13,398	20,840	6,616		
Miles per Gallon - Passenger Cars	27.0	28.4	27.3	22.1	26.0		
Gasoline Cost - Passenger Cars	\$29,190	\$29,623	\$13,061	\$26,854	\$9,363		
Maintenance Cost - Passenger Cars	\$16,423	\$23,287	\$13,917	\$10,771	\$3,575		
Maint. Cost per Mile - Passenger Cars	\$0.025	\$0.030	\$0.038	\$0.023	\$0.021		
Number of Vehicles - Light Trucks	53	50	39	40	58		
Miles Traveled - Light Trucks	360,982	375,543	370,160	358,909	370,122		
Miles Traveled per Light Truck	6,811	7,511	9,491	8,973	6,381		
Gas Use (gallons) - Light Trucks	23,943	23,025	21,081	20,213	25,238		
Miles per Gallon - Light Trucks	15.1	16.3	17.6	17.8	14.7		
Gasoline Cost - Light Trucks	\$28,720	\$25,167	\$20,212	\$26,460	\$37,098		
Maintenance Cost - Light Trucks	\$16,096	\$20,022	\$19,222	\$12,603	\$16,346		
Maint. Cost per Mile - Light Trucks	\$0.045	\$0.053	\$0.052	\$0.035	\$0.044		
Number of Vehicles - Diesel Vehicles							
Miles Traveled - Diesel Vehicles							
Miles Traveled per Diesel Vehicle							
Diesel Fuel Use (GGE) - Diesel Vehicles							
Diesel Fuel Cost - Diesel Vehicles							
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles							
Maint. Cost per Mile - Diesel Vehicles							
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	1	5	20	3	0		
Number of Exempted Vehicles	0	9	10	8	2		
CFV Acquisitions - Only New CFVs		2	3	5	3		
CFVs, AFVs and Exempted Vehicles	113	130	134	147	122		

. ,	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year					
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001	
Number of Vehicles - AFVs	10	9	32	39	42	
Miles Traveled - AFVs	95,317	141,322	572,570	697,218	712,301	
Gas Fuel Use (gallons) - AFVs	3,566	3,618	13,951	22,452	22,645	
Alt. Fuel Use (GGE) - AFVs	0	1,220	3,325	3,489	4,820	
Percent Alt. Fuel Use in AFVs	0	25%	19%	13%	18%	
Alt. Fuel Cost - AFVs	0	\$1,866	\$4,422	\$6,618	\$10,386	
Maintenance Cost - AFVs	\$2,005	\$2,353	\$12,479	\$9,532	\$24,474	
AFV Acquisitions - Only New AFVs		9	7	6	3	
Percent AFVs of New Acquisitions		82%	70%	55%	50%	
Number of Vehicles - CNG Vehicles						
Miles Traveled - CNG Vehicles						
Miles Traveled per CNG Vehicle						
Gas Fuel Use (gallons) - CNG Vehicles						
CNG Fuel Use (GGE) - CNG Vehicles						
CNG Fuel Cost - CNG Vehicles						
CNG Fuel Cost per GGE						
Maintenance Cost - CNG Vehicles						
Maint. Cost per Mile - CNG Vehicles						
Number of Vehicles - E85 Vehicles	10	9	32	39	42	
Miles Traveled - E85 Vehicles	95,317	141,322	572,570	697,218	712,301	
Miles Traveled per E85 Vehicle	9,532	15,702	17,893	17,877	16,960	
Gas Fuel Use (gallons) - E85 Vehicles	3,566	3,618	13,951	22,452	22,645	
E85 Fuel Use (GGE) - E85 Vehicles	0	1,220	3,325	3,489	4,820	
E85 Fuel Cost - E85 Vehicles	0	\$1,866	\$4,422	\$6,618	\$10,386	
E85 Fuel Cost per GGE	0	\$1.53	\$1.33	\$1.90	\$2.15	
Maintenance Cost - E85 Vehicles	\$2,005	\$2,353	\$12,479	\$9,532	\$24,474	
Maint. Cost per Mile - E85 Vehicles	\$0.0210	\$0.0166	\$0.0218	\$0.0137	\$0.0344	
Number of Vehicles - LPG Vehicles						
Miles Traveled - LPG Vehicles						
Miles Traveled per LPG Vehicle						
Gas Fuel Use (gallons) - LPG Vehicles						
LPG Fuel Use (GGE) - LPG Vehicles						
LPG Fuel Cost - LPG Vehicles						
LPG Fuel Cost per GGE						
Maintenance Cost - LPG Vehicles						
Maint. Cost per Mile - LPG Vehicles						

CFV Summary TableCentral Missouri State University

Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

Cummary tables contain data reported by state to	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	22	33	31	32	26		
Miles Traveled - Gasoline Vehicles	282,967	290,608	260,927	250,580	94,315		
Gas Use (gallons) - Gasoline Vehicles	11,869	15,242	13,409	12,694	6,843		
Gasoline Cost - Gasoline Vehicles	\$10,326	\$10,669	\$10,079	\$17,092	\$9,239		
Gasoline Cost per Gallon	\$0.87	\$0.70	\$0.75	\$1.35	\$1.35		
Maintenance Cost - Gasoline Vehicles	\$1,830	\$8,671	\$6,685	\$5,150	\$4,913		
Maint. Cost per Mile - Gasoline Vehicles	\$0.006	\$0.030	\$0.026	\$0.021	\$0.052		
Number of Vehicles - Passenger Cars	12	17	17	17	15		
Miles Traveled - Passenger Cars	194,442	171,303	159,796	151,227	43,654		
Miles Traveled per Passenger Car	16,204	10,077	9,400	8,896	2,910		
Gas Use (gallons) - Passenger Cars	7,777	7,275	6,568	5,925	2,214		
Miles per Gallon - Passenger Cars	25.0	23.5	24.3	25.5	19.7		
Gasoline Cost - Passenger Cars	\$6,766	\$5,092	\$5,079	\$7,946	\$2,989		
Maintenance Cost - Passenger Cars	\$1,260	\$2,824	\$3,611	\$3,516	\$1,478		
Maint. Cost per Mile - Passenger Cars	\$0.006	\$0.016	\$0.023	\$0.023	\$0.034		
Number of Vehicles - Light Trucks	10	16	14	15	11		
Miles Traveled - Light Trucks	88,525	119,305	101,131	99,353	50,661		
Miles Traveled per Light Truck	8,853	7,457	7,224	6,624	4,606		
Gas Use (gallons) - Light Trucks	4,092	7,967	6,841	6,769	4,629		
Miles per Gallon - Light Trucks	21.6	15.0	14.8	14.7	10.9		
Gasoline Cost - Light Trucks	\$3,560	\$5,577	\$5,000	\$9,146	\$6,250		
Maintenance Cost - Light Trucks	\$570	\$5,848	\$3,073	\$1,634	\$3,435		
Maint. Cost per Mile - Light Trucks	\$0.006	\$0.049	\$0.030	\$0.016	\$0.068		
Number of Vehicles - Diesel Vehicles	2	3	3	3	4		
Miles Traveled - Diesel Vehicles	19,927	36,623	33,696	37,745	33,705		
Miles Traveled per Diesel Vehicle	9,964	12,208	11,232	12,582	8,426		
Diesel Fuel Use (GGE) - Diesel Vehicles	1,264	3,163	2,931	3,555	3,453		
Diesel Fuel Cost - Diesel Vehicles	\$839	\$1,960	\$1,959	\$3,794	\$3,818		
B20 Fuel Use (GGE) - Diesel Vehicles	0	0	0	0	0		
B20 Fuel Cost - Diesel Vehicles	0	0	0	0	0		
Maintenance Cost - Diesel Vehicles	\$1,340	\$2,635	\$6,343	\$5,249	\$4,331		
Maint. Cost per Mile - Diesel Vehicles	\$0.067	\$0.072	\$0.188	\$0.139	\$0.128		
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	0	0	0	0	0		
Number of Exempted Vehicles	99	95	100	97	115		
CFV Acquisitions - Only New CFVs		0	2	0	0		
CFVs, AFVs and Exempted Vehicles	125	135	140	138	151		

	Fiscal Year					
Alternative Fuel Vehicles (AFVs)	1997	1998 est	1999	2000	2001	
Number of Vehicles - AFVs	2	4	6	6	6	
Miles Traveled - AFVs	10,101	21,315	32,528	33,936	11,760	
Gas Fuel Use (gallons) - AFVs	0	0	0	0	0	
Alt. Fuel Use (GGE) - AFVs	427	1,080	1,334	1,408	539	
Percent Alt. Fuel Use in AFVs	100%	100%	100%	100%	100%	
Alt. Fuel Cost - AFVs	\$496	\$880	\$1,264	\$1,646	\$1,015	
Maintenance Cost - AFVs	\$389	\$610	\$831	\$875	\$465	
AFV Acquisitions - Only New AFVs		0	0	0	0	
Percent AFVs of New Acquisitions		0	0	0	0	
Number of Vehicles - CNG Vehicles						
Miles Traveled - CNG Vehicles						
Miles Traveled per CNG Vehicle						
Gas Fuel Use (gallons) - CNG Vehicles						
CNG Fuel Use (GGE) - CNG Vehicles						
CNG Fuel Cost - CNG Vehicles						
CNG Fuel Cost per GGE						
Maintenance Cost - CNG Vehicles						
Maint. Cost per Mile - CNG Vehicles						
Number of Vehicles - E85 Vehicles						
Miles Traveled - E85 Vehicles						
Miles Traveled per E85 Vehicle						
Gas Fuel Use (gallons) - E85 Vehicles						
E85 Fuel Use (GGE) - E85 Vehicles						
E85 Fuel Cost - E85 Vehicles						
E85 Fuel Cost per GGE						
Maintenance Cost - E85 Vehicles						
Maint. Cost per Mile - E85 Vehicles						
Number of Vehicles - LPG Vehicles	2	4	6	6	6	
Miles Traveled - LPG Vehicles	10,101	21,315	32,528	33,936	11,760	
Miles Traveled per LPG Vehicle	5,051	5,329	5,421	5,656	1,960	
Gas Fuel Use (gallons) - LPG Vehicles	0	0	0	0	0	
LPG Fuel Use (GGE) - LPG Vehicles	427	1,080	1,334	1,408	539	
LPG Fuel Cost - LPG Vehicles	\$496	\$880	\$1,264	\$1,646	\$1,015	
LPG Fuel Cost per GGE	\$1.16	\$0.81	\$0.95	\$1.17	\$1.88	
Maintenance Cost - LPG Vehicles	\$389	\$610	\$831	\$875	\$465	
Maint. Cost per Mile - LPG Vehicles	\$0.0385	\$0.0286	\$0.0256	\$0.0258	\$0.0395	

Cummary tables contain data reported by state a	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	4	7	7	7	2		
Miles Traveled - Gasoline Vehicles	37,439	33,450	50,446	55,725	16,822		
Gas Use (gallons) - Gasoline Vehicles	3,608	3,504	6,695	7,369	1,341		
Gasoline Cost - Gasoline Vehicles	\$3,825	\$3,504	\$7,335	\$7,607	\$1,222		
Gasoline Cost per Gallon	\$1.06	\$1.00	\$1.10	\$1.03	\$0.91		
Maintenance Cost - Gasoline Vehicles	\$4,440	\$10,923	\$17,093	\$26,585	\$3,253		
Maint. Cost per Mile - Gasoline Vehicles	\$0.119	\$0.327	\$0.339	\$0.477	\$0.193		
Number of Vehicles - Passenger Cars	1	2	2	2	2		
Miles Traveled - Passenger Cars	14,808	3,750	11,650	19,450	16,822		
Miles Traveled per Passenger Car	14,808	1,875	5,825	9,725	8,411		
Gas Use (gallons) - Passenger Cars	632	149	1,080	1,300	1,341		
Miles per Gallon - Passenger Cars	23.4	25.2	10.8	15.0	12.5		
Gasoline Cost - Passenger Cars	\$671	\$149	\$1,188	\$1,504	\$1,222		
Maintenance Cost - Passenger Cars	\$490	\$500	\$1,463	\$11,645	\$3,253		
Maint. Cost per Mile - Passenger Cars	\$0.033	\$0.133	\$0.126	\$0.599	\$0.193		
Number of Vehicles - Light Trucks	1	2	2	2			
Miles Traveled - Light Trucks	10,367	10,700	16,676	11,996			
Miles Traveled per Light Truck	10,367	5,350	8,338	5,998			
Gas Use (gallons) - Light Trucks	746	787	1,397	950			
Miles per Gallon - Light Trucks	13.9	13.6	11.9	12.6			
Gasoline Cost - Light Trucks	\$790	\$787	\$1,449	\$1,197			
Maintenance Cost - Light Trucks	\$949	\$100	\$1,406	\$2,763			
Maint. Cost per Mile - Light Trucks	\$0.092	\$0.009	\$0.084	\$0.230			
Number of Vehicles - Diesel Vehicles							
Miles Traveled - Diesel Vehicles							
Miles Traveled per Diesel Vehicle							
Diesel Fuel Use (GGE) - Diesel Vehicles							
Diesel Fuel Cost - Diesel Vehicles							
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles							
Maint. Cost per Mile - Diesel Vehicles							
Number of Gasoline Buses	2	3	3	3	0		
Number of Gasoline Truck Others	0	0	0	0	0		
Number of Exempted Vehicles	3	0	0	0	6		
CFV Acquisitions - Only New CFVs		0	0	0	2		
CFVs, AFVs and Exempted Vehicles	7	7	7	7	8		

	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsiste Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs							
Miles Traveled - AFVs							
Gas Fuel Use (gallons) - AFVs		A1((i					
Alt. Fuel Use (GGE) - AFVs			e fuel vehicle a nts - section 414	•			
Percent Alt. Fuel Use in AFVs		Missouri Rev	vised Statutes -	only apply to			
Alt. Fuel Cost - AFVs		state agenc	ies with 15 or n vehicles.	nore eligible			
Maintenance Cost - AFVs							
AFV Acquisitions - Only New AFVs							
Percent AFVs of New Acquisitions							
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles							
Miles Traveled - E85 Vehicles							
Miles Traveled per E85 Vehicle							
Gas Fuel Use (gallons) - E85 Vehicles							
E85 Fuel Use (GGE) - E85 Vehicles							
E85 Fuel Cost - E85 Vehicles							
E85 Fuel Cost per GGE							
Maintenance Cost - E85 Vehicles							
Maint. Cost per Mile - E85 Vehicles							
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

	agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	7	7	7	8	3		
Miles Traveled - Gasoline Vehicles	77,237	52,015	37,270	46,407	43,737		
Gas Use (gallons) - Gasoline Vehicles	3,935	2,105	1,513	1,960	1,545		
Gasoline Cost - Gasoline Vehicles	\$4,206	\$1,901	\$1,106	\$2,144	\$2,026		
Gasoline Cost per Gallon	\$1.07	\$0.90	\$0.73	\$1.09	\$1.31		
Maintenance Cost - Gasoline Vehicles	\$4,064	\$1,699	\$1,570	\$944	\$849		
Maint. Cost per Mile - Gasoline Vehicles	\$0.053	\$0.033	\$0.042	\$0.020	\$0.019		
Number of Vehicles - Passenger Cars	6	6	6	6	1		
Miles Traveled - Passenger Cars	67,295	41,993	27,409	34,599	22,473		
Miles Traveled per Passenger Car	11,216	6,999	4,568	5,767	22,473		
Gas Use (gallons) - Passenger Cars	3,351	1,620	992	1,282	864		
Miles per Gallon - Passenger Cars	20.1	25.9	27.6	27.0	26.0		
Gasoline Cost - Passenger Cars	\$3,563	\$1,488	\$725	\$1,398	\$1,219		
Maintenance Cost - Passenger Cars	\$4,001	\$1,623	\$1,348	\$790	\$684		
Maint. Cost per Mile - Passenger Cars	\$0.059	\$0.039	\$0.049	\$0.023	\$0.030		
Number of Vehicles - Light Trucks	1	1	1	2	2		
Miles Traveled - Light Trucks	9,942	10,022	9,861	11,808	21,264		
Miles Traveled per Light Truck	9,942	10,022	9,861	5,904	10,632		
Gas Use (gallons) - Light Trucks	584	485	521	678	681		
Miles per Gallon - Light Trucks	17.0	20.7	18.9	17.4	31.2		
Gasoline Cost - Light Trucks	\$643	\$413	\$381	\$746	\$807		
Maintenance Cost - Light Trucks	\$63	\$76	\$222	\$154	\$165		
Maint. Cost per Mile - Light Trucks	\$0.006	\$0.008	\$0.023	\$0.013	\$0.008		
Number of Vehicles - Diesel Vehicles							
Miles Traveled - Diesel Vehicles							
Miles Traveled per Diesel Vehicle							
Diesel Fuel Use (GGE) - Diesel Vehicles							
Diesel Fuel Cost - Diesel Vehicles							
B20 Fuel Use (GGE) - Diesel Vehicles							
B20 Fuel Cost - Diesel Vehicles							
Maintenance Cost - Diesel Vehicles							
Maint. Cost per Mile - Diesel Vehicles							
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	0	0	0	0	0		
Number of Exempted Vehicles	27	25	25	25	35		
CFV Acquisitions - Only New CFVs		0	0	0	0		
CFVs, AFVs and Exempted Vehicles	34	32	32	33	38		

	Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs							
Miles Traveled - AFVs							
Gas Fuel Use (gallons) - AFVs							
Alt. Fuel Use (GGE) - AFVs			e fuel vehicle a its - section 414				
Percent Alt. Fuel Use in AFVs		Missouri Rev	ised Statutes -	only apply to			
Alt. Fuel Cost - AFVs		state agenc	ies with 15 or m vehicles.	nore eligible			
Maintenance Cost - AFVs							
AFV Acquisitions - Only New AFVs							
Percent AFVs of New Acquisitions							
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles							
Miles Traveled - E85 Vehicles							
Miles Traveled per E85 Vehicle							
Gas Fuel Use (gallons) - E85 Vehicles							
E85 Fuel Use (GGE) - E85 Vehicles							
E85 Fuel Cost - E85 Vehicles							
E85 Fuel Cost per GGE							
Maintenance Cost - E85 Vehicles							
Maint. Cost per Mile - E85 Vehicles							
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles				T			

	Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997 est	1998 est	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	15	15	15	16	12		
Miles Traveled - Gasoline Vehicles	163,209	163,209	163,209	142,346	131,194		
Gas Use (gallons) - Gasoline Vehicles	9,847	9,847	9,847	7,250	6,887		
Gasoline Cost - Gasoline Vehicles	\$10,437	\$9,846	\$10,048	\$8,552	\$8,374		
Gasoline Cost per Gallon	\$1.06	\$1.00	\$1.02	\$1.18	\$1.22		
Maintenance Cost - Gasoline Vehicles	\$5,768	\$5,768	\$5,768	\$8,261	\$5,301		
Maint. Cost per Mile - Gasoline Vehicles	\$0.035	\$0.035	\$0.035	\$0.058	\$0.040		
Number of Vehicles - Passenger Cars	10	10	10	11	8		
Miles Traveled - Passenger Cars	103,074	103,074	103,074	87,875	98,932		
Miles Traveled per Passenger Car	10,307	10,307	10,307	7,989	12,367		
Gas Use (gallons) - Passenger Cars	4,380	4,380	4,380	3,462	4,066		
Miles per Gallon - Passenger Cars	23.5	23.5	23.5	25.4	24.3		
Gasoline Cost - Passenger Cars	\$4,643	\$4,380	\$4,582	\$4,140	\$5,232		
Maintenance Cost - Passenger Cars	\$3,092	\$3,092	\$3,092	\$2,566	\$2,656		
Maint. Cost per Mile - Passenger Cars	\$0.030	\$0.030	\$0.030	\$0.029	\$0.027		
Number of Vehicles - Light Trucks	4	4	4	4	3		
Miles Traveled - Light Trucks	49,131	49,131	49,131	49,046	26,528		
Miles Traveled per Light Truck	12,283	12,283	12,283	12,262	8,843		
Gas Use (gallons) - Light Trucks	3,773	3,773	3,773	3,179	1,952		
Miles per Gallon - Light Trucks	13.0	13.0	13.0	15.4	13.6		
Gasoline Cost - Light Trucks	\$3,999	\$3,773	\$3,817	\$3,711	\$2,230		
Maintenance Cost - Light Trucks	\$2,161	\$2,161	\$2,161	\$3,441	\$1,510		
Maint. Cost per Mile - Light Trucks	\$0.044	\$0.044	\$0.044	\$0.070	\$0.057		
Number of Vehicles - Diesel Vehicles	1	1	1	1	1		
Miles Traveled - Diesel Vehicles	15,187	15,187	15,187	16,605	14,928		
Miles Traveled per Diesel Vehicle	15,187	15,187	15,187	16,605	14,928		
Diesel Fuel Use (GGE) - Diesel Vehicles	2,119	2,119	2,119	2,151	1,684		
Diesel Fuel Cost - Diesel Vehicles	\$1,992	\$1,610	\$1,369	\$2,056	\$1,430		
B20 Fuel Use (GGE) - Diesel Vehicles	0	0	0	0	0		
B20 Fuel Cost - Diesel Vehicles	0	0	0	0	0		
Maintenance Cost - Diesel Vehicles	\$2,081	\$2,081	\$2,081	\$1,868	\$2,955		
Maint. Cost per Mile - Diesel Vehicles	\$0.137	\$0.137	\$0.137	\$0.112	\$0.198		
Number of Gasoline Buses	1	1	1	1	1		
Number of Gasoline Truck Others	0	0	0	0	0		
Number of Exempted Vehicles	21	21	21	20	24		
CFV Acquisitions - Only New CFVs		0	0	2	1		
CFVs, AFVs and Exempted Vehicles	37	37	37	37	37		

. ,	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsister Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs							
Miles Traveled - AFVs							
Gas Fuel Use (gallons) - AFVs		A 14					
Alt. Fuel Use (GGE) - AFVs			e fuel vehicle a nts - section 41	•			
Percent Alt. Fuel Use in AFVs		Missouri Rev	vised Statutes -	only apply to			
Alt. Fuel Cost - AFVs		state agenc	ies with 15 or n vehicles.	nore eligible			
Maintenance Cost - AFVs							
AFV Acquisitions - Only New AFVs							
Percent AFVs of New Acquisitions							
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles							
Miles Traveled - E85 Vehicles							
Miles Traveled per E85 Vehicle							
Gas Fuel Use (gallons) - E85 Vehicles							
E85 Fuel Use (GGE) - E85 Vehicles							
E85 Fuel Cost - E85 Vehicles							
E85 Fuel Cost per GGE							
Maintenance Cost - E85 Vehicles							
Maint. Cost per Mile - E85 Vehicles							
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

Summary tubies contain data reported by state	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year						
Conventional Fuel Vehicles (CFVs)	1997 est	1998	1999	2000	2001		
Number of Vehicles - Gasoline Vehicles	3	3	3	3	3		
Miles Traveled - Gasoline Vehicles	36,978	34,735	31,081	32,915	38,338		
Gas Use (gallons) - Gasoline Vehicles	3,578	3,463	2,864	3,135	3,550		
Gasoline Cost - Gasoline Vehicles	\$2,872	\$2,320	\$2,893	\$4,389	\$5,330		
Gasoline Cost per Gallon	\$0.80	\$0.67	\$1.01	\$1.40	\$1.50		
Maintenance Cost - Gasoline Vehicles	\$1,786	\$1,337	\$1,717	\$2,533	\$2,812		
Maint. Cost per Mile - Gasoline Vehicles	\$0.048	\$0.038	\$0.055	\$0.077	\$0.073		
Number of Vehicles - Passenger Cars							
Miles Traveled - Passenger Cars							
Miles Traveled per Passenger Car							
Gas Use (gallons) - Passenger Cars							
Miles per Gallon - Passenger Cars							
Gasoline Cost - Passenger Cars							
Maintenance Cost - Passenger Cars							
Maint. Cost per Mile - Passenger Cars							
Number of Vehicles - Light Trucks	3	3	3	3	3		
Miles Traveled - Light Trucks	36,978	34,735	31,081	32,915	38,338		
Miles Traveled per Light Truck	12,326	11,578	10,360	10,972	12,779		
Gas Use (gallons) - Light Trucks	3,578	3,463	2,864	3,135	3,550		
Miles per Gallon - Light Trucks	10.3	10.0	10.9	10.5	10.8		
Gasoline Cost - Light Trucks	\$2,872	\$2,320	\$2,893	\$4,389	\$5,330		
Maintenance Cost - Light Trucks	\$1,786	\$1,337	\$1,717	\$2,533	\$2,812		
Maint. Cost per Mile - Light Trucks	\$0.048	\$0.038	\$0.055	\$0.077	\$0.073		
Number of Vehicles - Diesel Vehicles	1	1	2	2	2		
Miles Traveled - Diesel Vehicles	16,575	14,565	16,499	22,204	29,414		
Miles Traveled per Diesel Vehicle	16,575	14,565	8,250	11,102	14,707		
Diesel Fuel Use (GGE) - Diesel Vehicles	2,016	1,372	2,920	4,391	5,134		
Diesel Fuel Cost - Diesel Vehicles	\$1,671	\$811	\$2,646	\$5,246	\$6,404		
B20 Fuel Use (GGE) - Diesel Vehicles	0	0	0	0	0		
B20 Fuel Cost - Diesel Vehicles	0	0	0	0	0		
Maintenance Cost - Diesel Vehicles	\$1,329	\$1,196	\$2,010	\$3,380	\$4,284		
Maint. Cost per Mile - Diesel Vehicles	\$0.080	\$0.082	\$0.122	\$0.152	\$0.146		
Number of Gasoline Buses	0	0	0	0	0		
Number of Gasoline Truck Others	0	0	0	0	0		
Number of Exempted Vehicles	23	22	27	23	20		
CFV Acquisitions - Only New CFVs		0	1	0	0		
CFVs, AFVs and Exempted Vehicles	27	26	32	28	25		

	agencies. Estimates (est) are provided when the actual data is unavailable / inconsister Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs							
Miles Traveled - AFVs							
Gas Fuel Use (gallons) - AFVs							
Alt. Fuel Use (GGE) - AFVs			e fuel vehicle a its - section 414				
Percent Alt. Fuel Use in AFVs		Missouri Rev	ised Statutes -	only apply to			
Alt. Fuel Cost - AFVs		state agenc	ies with 15 or m vehicles.	nore eligible			
Maintenance Cost - AFVs							
AFV Acquisitions - Only New AFVs							
Percent AFVs of New Acquisitions							
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles							
Miles Traveled - E85 Vehicles							
Miles Traveled per E85 Vehicle							
Gas Fuel Use (gallons) - E85 Vehicles							
E85 Fuel Use (GGE) - E85 Vehicles							
E85 Fuel Cost - E85 Vehicles							
E85 Fuel Cost per GGE							
Maintenance Cost - E85 Vehicles							
Maint. Cost per Mile - E85 Vehicles							
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles				T	-		

Cummary tables contain data reported by state to	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year							
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001			
Number of Vehicles - Gasoline Vehicles	76	33	33	31	36			
Miles Traveled - Gasoline Vehicles	798,707	372,629	392,900	400,748	320,202			
Gas Use (gallons) - Gasoline Vehicles	46,231	17,184	18,767	18,419	14,783			
Gasoline Cost - Gasoline Vehicles	\$48,960	\$14,602	\$14,731	\$19,886	\$19,062			
Gasoline Cost per Gallon	\$1.06	\$0.85	\$0.78	\$1.08	\$1.29			
Maintenance Cost - Gasoline Vehicles	\$47,271	\$2,803	\$3,807	\$8,413	\$6,078			
Maint. Cost per Mile - Gasoline Vehicles	\$0.059	\$0.008	\$0.010	\$0.021	\$0.019			
Number of Vehicles - Passenger Cars	24	20	21	19	20			
Miles Traveled - Passenger Cars	336,245	267,481	275,591	286,552	210,195			
Miles Traveled per Passenger Car	14,010	13,374	13,123	15,082	10,510			
Gas Use (gallons) - Passenger Cars	14,188	9,770	10,198	10,152	6,858			
Miles per Gallon - Passenger Cars	23.7	27.4	27.0	28.2	30.6			
Gasoline Cost - Passenger Cars	\$15,039	\$8,304	\$8,045	\$12,036	\$8,754			
Maintenance Cost - Passenger Cars	\$15,097	\$1,639	\$2,631	\$5,499	\$3,469			
Maint. Cost per Mile - Passenger Cars	\$0.045	\$0.006	\$0.010	\$0.019	\$0.017			
Number of Vehicles - Light Trucks	50	12	12	12	16			
Miles Traveled - Light Trucks	450,198	104,648	117,309	114,196	110,007			
Miles Traveled per Light Truck	9,004	8,721	9,776	9,516	6,875			
Gas Use (gallons) - Light Trucks	29,814	7,364	8,569	8,267	7,925			
Miles per Gallon - Light Trucks	15.1	14.2	13.7	13.8	13.9			
Gasoline Cost - Light Trucks	\$31,557	\$6,258	\$6,686	\$7,850	\$10,308			
Maintenance Cost - Light Trucks	\$29,173	\$1,139	\$1,176	\$2,914	\$2,609			
Maint. Cost per Mile - Light Trucks	\$0.065	\$0.011	\$0.010	\$0.026	\$0.024			
Number of Vehicles - Diesel Vehicles	3	3	4	5	5			
Miles Traveled - Diesel Vehicles	34,401	60,000	90,555	93,190	88,850			
Miles Traveled per Diesel Vehicle	11,467	20,000	22,639	18,638	17,770			
Diesel Fuel Use (GGE) - Diesel Vehicles	7,818	13,560	20,465	21,061	21,644			
Diesel Fuel Cost - Diesel Vehicles	\$8,303	\$9,600	\$14,126	\$18,635	\$22,989			
B20 Fuel Use (GGE) - Diesel Vehicles	0	0	0	0	1,892			
B20 Fuel Cost - Diesel Vehicles	0	0	0	0	\$2,399			
Maintenance Cost - Diesel Vehicles	\$39,352	\$7,313	\$50,749	\$16,261	\$10,385			
Maint. Cost per Mile - Diesel Vehicles	\$1.144	\$0.122	\$0.560	\$0.174	\$0.117			
Number of Gasoline Buses	2	1	0	0	0			
Number of Gasoline Truck Others	0	0	0	0	0			
Number of Exempted Vehicles	5	62	67	69	71			
CFV Acquisitions - Only New CFVs		6	4	0	4			
CFVs, AFVs and Exempted Vehicles	84	98	105	109	121			

	Fiscal Year							
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001			
Number of Vehicles - AFVs			1	4	9			
Miles Traveled - AFVs			11,500	63,389	108,728			
Gas Fuel Use (gallons) - AFVs			426	2,264	4,208			
Alt. Fuel Use (GGE) - AFVs			0	0	0			
Percent Alt. Fuel Use in AFVs			0	0	0			
Alt. Fuel Cost - AFVs			0	0	0			
Maintenance Cost - AFVs			\$36	\$765	\$307			
AFV Acquisitions - Only New AFVs		0	1	2	4			
Percent AFVs of New Acquisitions		0	20%	100%	50%			
Number of Vehicles - CNG Vehicles								
Miles Traveled - CNG Vehicles								
Miles Traveled per CNG Vehicle								
Gas Fuel Use (gallons) - CNG Vehicles								
CNG Fuel Use (GGE) - CNG Vehicles								
CNG Fuel Cost - CNG Vehicles								
CNG Fuel Cost per GGE								
Maintenance Cost - CNG Vehicles								
Maint. Cost per Mile - CNG Vehicles								
Number of Vehicles - E85 Vehicles			1	4	9			
Miles Traveled - E85 Vehicles			11,500	63,389	108,728			
Miles Traveled per E85 Vehicle			11,500	15,847	12,081			
Gas Fuel Use (gallons) - E85 Vehicles			426	2,264	4,208			
E85 Fuel Use (GGE) - E85 Vehicles			0	0	0			
E85 Fuel Cost - E85 Vehicles			0	0	0			
E85 Fuel Cost per GGE			0	0	0			
Maintenance Cost - E85 Vehicles			\$36	\$765	\$307			
Maint. Cost per Mile - E85 Vehicles			\$0.0031	\$0.0121	\$0.0028			
Number of Vehicles - LPG Vehicles								
Miles Traveled - LPG Vehicles								
Miles Traveled per LPG Vehicle								
Gas Fuel Use (gallons) - LPG Vehicles								
LPG Fuel Use (GGE) - LPG Vehicles								
LPG Fuel Cost - LPG Vehicles								
LPG Fuel Cost per GGE								
Maintenance Cost - LPG Vehicles								
Maint. Cost per Mile - LPG Vehicles								

CFV Summary TableSoutheast Missouri State University
Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

Cummary tables contain data reported by state	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year							
Conventional Fuel Vehicles (CFVs)	1997 est	1998	1999	2000	2001			
Number of Vehicles - Gasoline Vehicles	37	27	46	25	32			
Miles Traveled - Gasoline Vehicles	432,598	315,506	549,689	344,174	300,001			
Gas Use (gallons) - Gasoline Vehicles	20,959	12,924	28,993	17,263	13,296			
Gasoline Cost - Gasoline Vehicles	\$19,061	\$11,448	\$26,673	\$21,218	\$18,906			
Gasoline Cost per Gallon	\$0.91	\$0.89	\$0.92	\$1.23	\$1.42			
Maintenance Cost - Gasoline Vehicles	\$13,608	\$10,373	\$16,842	\$7,788	\$8,587			
Maint. Cost per Mile - Gasoline Vehicles	\$0.031	\$0.033	\$0.031	\$0.023	\$0.029			
Number of Vehicles - Passenger Cars	27	19	34	21	25			
Miles Traveled - Passenger Cars	334,942	223,319	446,564	273,535	264,506			
Miles Traveled per Passenger Car	12,405	11,754	13,134	13,025	10,580			
Gas Use (gallons) - Passenger Cars	14,393	9,387	19,398	13,034	10,862			
Miles per Gallon - Passenger Cars	23.3	23.8	23.0	21.0	24.4			
Gasoline Cost - Passenger Cars	\$13,156	\$8,466	\$17,845	\$16,033	\$15,316			
Maintenance Cost - Passenger Cars	\$9,535	\$6,606	\$12,463	\$6,568	\$7,369			
Maint. Cost per Mile - Passenger Cars	\$0.028	\$0.030	\$0.028	\$0.024	\$0.028			
Number of Vehicles - Light Trucks	10	8	12	4	7			
Miles Traveled - Light Trucks	97,656	92,187	103,125	70,639	35,495			
Miles Traveled per Light Truck	9,766	11,523	8,594	17,660	5,071			
Gas Use (gallons) - Light Trucks	6,567	3,538	9,595	4,229	2,434			
Miles per Gallon - Light Trucks	14.9	26.1	10.7	16.7	14.6			
Gasoline Cost - Light Trucks	\$5,905	\$2,981	\$8,828	\$5,185	\$3,590			
Maintenance Cost - Light Trucks	\$4,073	\$3,767	\$4,379	\$1,220	\$1,218			
Maint. Cost per Mile - Light Trucks	\$0.042	\$0.041	\$0.042	\$0.017	\$0.034			
Number of Vehicles - Diesel Vehicles								
Miles Traveled - Diesel Vehicles								
Miles Traveled per Diesel Vehicle								
Diesel Fuel Use (GGE) - Diesel Vehicles								
Diesel Fuel Cost - Diesel Vehicles								
B20 Fuel Use (GGE) - Diesel Vehicles								
B20 Fuel Cost - Diesel Vehicles								
Maintenance Cost - Diesel Vehicles								
Maint. Cost per Mile - Diesel Vehicles								
Number of Gasoline Buses	0	0	0	0	0			
Number of Gasoline Truck Others	0	0	0	0	0			
Number of Exempted Vehicles	118	115	121	125	137			
CFV Acquisitions - Only New CFVs		4	12	7	4			
CFVs, AFVs and Exempted Vehicles	155	142	167	150	169			

AFV Summary Table Southeast Missouri State University Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

	agencies. Estimates (est) are provided when the actual data is unavailable / inconsister Fiscal Year						
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001		
Number of Vehicles - AFVs							
Miles Traveled - AFVs							
Gas Fuel Use (gallons) - AFVs							
Alt. Fuel Use (GGE) - AFVs							
Percent Alt. Fuel Use in AFVs							
Alt. Fuel Cost - AFVs							
Maintenance Cost - AFVs							
AFV Acquisitions - Only New AFVs							
Percent AFVs of New Acquisitions							
Number of Vehicles - CNG Vehicles							
Miles Traveled - CNG Vehicles							
Miles Traveled per CNG Vehicle							
Gas Fuel Use (gallons) - CNG Vehicles							
CNG Fuel Use (GGE) - CNG Vehicles							
CNG Fuel Cost - CNG Vehicles							
CNG Fuel Cost per GGE							
Maintenance Cost - CNG Vehicles							
Maint. Cost per Mile - CNG Vehicles							
Number of Vehicles - E85 Vehicles							
Miles Traveled - E85 Vehicles							
Miles Traveled per E85 Vehicle							
Gas Fuel Use (gallons) - E85 Vehicles							
E85 Fuel Use (GGE) - E85 Vehicles							
E85 Fuel Cost - E85 Vehicles							
E85 Fuel Cost per GGE							
Maintenance Cost - E85 Vehicles							
Maint. Cost per Mile - E85 Vehicles							
Number of Vehicles - LPG Vehicles							
Miles Traveled - LPG Vehicles							
Miles Traveled per LPG Vehicle							
Gas Fuel Use (gallons) - LPG Vehicles							
LPG Fuel Use (GGE) - LPG Vehicles							
LPG Fuel Cost - LPG Vehicles							
LPG Fuel Cost per GGE							
Maintenance Cost - LPG Vehicles							
Maint. Cost per Mile - LPG Vehicles							

CFV Summary TableSouthwest Missouri State University
Summary tables contain data reported by state agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent.

Summary tables contain data reported by state to	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent. Fiscal Year							
Conventional Fuel Vehicles (CFVs)	1997	1998 est	1999 est	2000	2001			
Number of Vehicles - Gasoline Vehicles	30	32	31	22	25			
Miles Traveled - Gasoline Vehicles	244,267	239,350	227,854	177,821	150,989			
Gas Use (gallons) - Gasoline Vehicles	14,277	14,487	13,916	11,563	8,713			
Gasoline Cost - Gasoline Vehicles	\$16,806	\$14,475	\$12,810	\$15,799	\$12,554			
Gasoline Cost per Gallon	\$1.18	\$1.00	\$0.92	\$1.37	\$1.44			
Maintenance Cost - Gasoline Vehicles	\$8,997	\$12,435	\$6,928	\$8,481	\$6,454			
Maint. Cost per Mile - Gasoline Vehicles	\$0.037	\$0.052	\$0.030	\$0.048	\$0.043			
Number of Vehicles - Passenger Cars	8	8	7	5	6			
Miles Traveled - Passenger Cars	91,861	91,736	80,269	71,040	48,420			
Miles Traveled per Passenger Car	11,483	11,467	11,467	14,208	8,070			
Gas Use (gallons) - Passenger Cars	3,926	3,937	3,445	2,960	2,043			
Miles per Gallon - Passenger Cars	23.4	23.3	23.3	24.0	23.7			
Gasoline Cost - Passenger Cars	\$4,550	\$3,937	\$3,169	\$3,632	\$2,915			
Maintenance Cost - Passenger Cars	\$2,995	\$2,752	\$3,511	\$1,146	\$1,299			
Maint. Cost per Mile - Passenger Cars	\$0.033	\$0.030	\$0.044	\$0.016	\$0.027			
Number of Vehicles - Light Trucks	22	23	23	17	19			
Miles Traveled - Light Trucks	152,406	143,589	143,589	106,781	102,569			
Miles Traveled per Light Truck	6,928	6,243	6,243	6,281	5,398			
Gas Use (gallons) - Light Trucks	10,351	10,112	10,112	8,603	6,670			
Miles per Gallon - Light Trucks	14.7	14.2	14.2	12.4	15.4			
Gasoline Cost - Light Trucks	\$12,256	\$10,112	\$9,303	\$12,167	\$9,639			
Maintenance Cost - Light Trucks	\$6,002	\$9,233	\$3,112	\$7,335	\$5,155			
Maint. Cost per Mile - Light Trucks	\$0.039	\$0.064	\$0.022	\$0.069	\$0.050			
Number of Vehicles - Diesel Vehicles				1				
Miles Traveled - Diesel Vehicles				10,490				
Miles Traveled per Diesel Vehicle				10,490				
Diesel Fuel Use (GGE) - Diesel Vehicles				853				
Diesel Fuel Cost - Diesel Vehicles				\$957				
B20 Fuel Use (GGE) - Diesel Vehicles				0				
B20 Fuel Cost - Diesel Vehicles				0				
Maintenance Cost - Diesel Vehicles				\$395				
Maint. Cost per Mile - Diesel Vehicles				\$0.038				
Number of Gasoline Buses	0	0	0	0	0			
Number of Gasoline Truck Others	0	1	1	0	0			
Number of Exempted Vehicles	138	114	117	111	92			
CFV Acquisitions - Only New CFVs		0	0	0	0			
CFVs, AFVs and Exempted Vehicles	168	146	148	134	117			

	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsisten Fiscal Year							
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001			
Number of Vehicles - AFVs								
Miles Traveled - AFVs								
Gas Fuel Use (gallons) - AFVs								
Alt. Fuel Use (GGE) - AFVs								
Percent Alt. Fuel Use in AFVs								
Alt. Fuel Cost - AFVs								
Maintenance Cost - AFVs								
AFV Acquisitions - Only New AFVs								
Percent AFVs of New Acquisitions								
Number of Vehicles - CNG Vehicles								
Miles Traveled - CNG Vehicles								
Miles Traveled per CNG Vehicle								
Gas Fuel Use (gallons) - CNG Vehicles								
CNG Fuel Use (GGE) - CNG Vehicles								
CNG Fuel Cost - CNG Vehicles								
CNG Fuel Cost per GGE								
Maintenance Cost - CNG Vehicles								
Maint. Cost per Mile - CNG Vehicles								
Number of Vehicles - E85 Vehicles								
Miles Traveled - E85 Vehicles								
Miles Traveled per E85 Vehicle								
Gas Fuel Use (gallons) - E85 Vehicles								
E85 Fuel Use (GGE) - E85 Vehicles								
E85 Fuel Cost - E85 Vehicles								
E85 Fuel Cost per GGE								
Maintenance Cost - E85 Vehicles								
Maint. Cost per Mile - E85 Vehicles								
Number of Vehicles - LPG Vehicles								
Miles Traveled - LPG Vehicles								
Miles Traveled per LPG Vehicle								
Gas Fuel Use (gallons) - LPG Vehicles								
LPG Fuel Use (GGE) - LPG Vehicles								
LPG Fuel Cost - LPG Vehicles								
LPG Fuel Cost per GGE								
Maintenance Cost - LPG Vehicles								
Maint. Cost per Mile - LPG Vehicles								

	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent Fiscal Year							
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001			
Number of Vehicles - Gasoline Vehicles	27	23	22	21	20			
Miles Traveled - Gasoline Vehicles	555,033	465,676	412,838	436,958	391,290			
Gas Use (gallons) - Gasoline Vehicles	30,209	23,135	24,381	22,995	21,761			
Gasoline Cost - Gasoline Vehicles	\$36,905	\$24,485	\$24,678	\$31,247	\$31,919			
Gasoline Cost per Gallon	\$1.22	\$1.06	\$1.01	\$1.36	\$1.47			
Maintenance Cost - Gasoline Vehicles	\$11,926	\$18,685	\$13,170	\$10,456	\$16,250			
Maint. Cost per Mile - Gasoline Vehicles	\$0.021	\$0.040	\$0.032	\$0.024	\$0.042			
Number of Vehicles - Passenger Cars	10	6	2	2	1			
Miles Traveled - Passenger Cars	215,800	134,124	54,831	58,254	31,020			
Miles Traveled per Passenger Car	21,580	22,354	27,416	29,127	31,020			
Gas Use (gallons) - Passenger Cars	7,869	4,050	2,162	2,276	1,338			
Miles per Gallon - Passenger Cars	27.4	33.1	25.4	25.6	23.2			
Gasoline Cost - Passenger Cars	\$9,707	\$4,162	\$2,760	\$3,239	\$2,120			
Maintenance Cost - Passenger Cars	\$5,400	\$8,997	\$656	\$293	\$794			
Maint. Cost per Mile - Passenger Cars	\$0.025	\$0.067	\$0.012	\$0.005	\$0.026			
Number of Vehicles - Light Trucks	16	16	19	18	19			
Miles Traveled - Light Trucks	330,310	316,753	339,065	377,417	360,270			
Miles Traveled per Light Truck	20,644	19,797	17,846	20,968	18,962			
Gas Use (gallons) - Light Trucks	20,312	17,284	19,651	20,635	20,423			
Miles per Gallon - Light Trucks	16.3	18.3	17.3	18.3	17.6			
Gasoline Cost - Light Trucks	\$24,740	\$18,385	\$19,371	\$27,914	\$29,799			
Maintenance Cost - Light Trucks	\$3,185	\$8,385	\$8,206	\$10,105	\$15,456			
Maint. Cost per Mile - Light Trucks	\$0.010	\$0.026	\$0.024	\$0.027	\$0.043			
Number of Vehicles - Diesel Vehicles	2	1		2	2			
Miles Traveled - Diesel Vehicles	22,020	30,064		36,049	41,413			
Miles Traveled per Diesel Vehicle	11,010	30,064		18,025	20,707			
Diesel Fuel Use (GGE) - Diesel Vehicles	3,748	5,703		3,835	4,301			
Diesel Fuel Cost - Diesel Vehicles	\$4,192	\$5,538		\$4,429	\$5,556			
B20 Fuel Use (GGE) - Diesel Vehicles	0	0		0	0			
B20 Fuel Cost - Diesel Vehicles	0	0		0	0			
Maintenance Cost - Diesel Vehicles	\$4,257	\$2,594		\$3,082	\$3,527			
Maint. Cost per Mile - Diesel Vehicles	\$0.193	\$0.086		\$0.085	\$0.085			
Number of Gasoline Buses	1	1	1	1	0			
Number of Gasoline Truck Others	0	0	0	0	0			
Number of Exempted Vehicles	14	14	24	23	22			
CFV Acquisitions - Only New CFVs		1	6	2	5			
CFVs, AFVs and Exempted Vehicles	43	42	50	51	51			

	Fiscal Year							
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001			
Number of Vehicles - AFVs		4	4	5	7			
Miles Traveled - AFVs		95,669	92,904	104,570	195,732			
Gas Fuel Use (gallons) - AFVs		3,448	3,640	3,956	7,187			
Alt. Fuel Use (GGE) - AFVs		0	0	0	0			
Percent Alt. Fuel Use in AFVs		0	0	0	0			
Alt. Fuel Cost - AFVs		0	0	0	0			
Maintenance Cost - AFVs		\$192	\$606	\$5,518	\$4,203			
AFV Acquisitions - Only New AFVs		0	0	1	2			
Percent AFVs of New Acquisitions		0	0	33%	29%			
Number of Vehicles - CNG Vehicles								
Miles Traveled - CNG Vehicles								
Miles Traveled per CNG Vehicle								
Gas Fuel Use (gallons) - CNG Vehicles								
CNG Fuel Use (GGE) - CNG Vehicles								
CNG Fuel Cost - CNG Vehicles								
CNG Fuel Cost per GGE								
Maintenance Cost - CNG Vehicles								
Maint. Cost per Mile - CNG Vehicles								
Number of Vehicles - E85 Vehicles		4	4	5	7			
Miles Traveled - E85 Vehicles		95,669	92,904	104,570	195,732			
Miles Traveled per E85 Vehicle		23,917	23,226	20,914	27,962			
Gas Fuel Use (gallons) - E85 Vehicles		3,448	3,640	3,956	7,187			
E85 Fuel Use (GGE) - E85 Vehicles		0	0	0	0			
E85 Fuel Cost - E85 Vehicles		0	0	0	0			
E85 Fuel Cost per GGE		0	0	0	0			
Maintenance Cost - E85 Vehicles		\$192	\$606	\$5,518	\$4,203			
Maint. Cost per Mile - E85 Vehicles		\$0.0020	\$0.0065	\$0.0528	\$0.0215			
Number of Vehicles - LPG Vehicles								
Miles Traveled - LPG Vehicles								
Miles Traveled per LPG Vehicle								
Gas Fuel Use (gallons) - LPG Vehicles								
LPG Fuel Use (GGE) - LPG Vehicles								
LPG Fuel Cost - LPG Vehicles								
LPG Fuel Cost per GGE								
Maintenance Cost - LPG Vehicles								
Maint. Cost per Mile - LPG Vehicles								

	e agencies. Estimates (est) are provided when the actual data is unavailable / inconsistent Fiscal Year							
Conventional Fuel Vehicles (CFVs)	1997	1998	1999	2000	2001			
Number of Vehicles - Gasoline Vehicles	587	476	627	722	723			
Miles Traveled - Gasoline Vehicles	4,241,987	2,974,460	4,194,414	4,274,520	3,945,701			
Gas Use (gallons) - Gasoline Vehicles	271,381	189,525	276,455	304,957	271,116			
Gasoline Cost - Gasoline Vehicles	\$284,349	\$200,453	\$276,236	\$391,560	\$391,390			
Gasoline Cost per Gallon	\$1.05	\$1.06	\$1.00	\$1.28	\$1.44			
Maintenance Cost - Gasoline Vehicles	\$328,450	\$292,867	\$361,959	\$494,730	\$406,214			
Maint. Cost per Mile - Gasoline Vehicles	\$0.077	\$0.098	\$0.086	\$0.116	\$0.103			
Number of Vehicles - Passenger Cars	182	155	176	178	185			
Miles Traveled - Passenger Cars	1,436,888	898,534	1,137,497	1,122,110	1,248,033			
Miles Traveled per Passenger Car	7,895	5,797	6,463	6,304	6,746			
Gas Use (gallons) - Passenger Cars	56,272	38,209	57,389	58,728	62,260			
Miles per Gallon - Passenger Cars	25.5	23.5	19.8	19.1	20.0			
Gasoline Cost - Passenger Cars	\$61,825	\$39,388	\$56,979	\$72,611	\$95,757			
Maintenance Cost - Passenger Cars	\$61,210	\$54,270	\$50,124	\$58,941	\$79,582			
Maint. Cost per Mile - Passenger Cars	\$0.043	\$0.060	\$0.044	\$0.053	\$0.064			
Number of Vehicles - Light Trucks	397	304	429	538	531			
Miles Traveled - Light Trucks	2,745,107	1,964,354	2,969,177	3,094,365	2,648,255			
Miles Traveled per Light Truck	6,915	6,462	6,921	5,752	4,987			
Gas Use (gallons) - Light Trucks	203,330	140,654	208,711	237,613	201,143			
Miles per Gallon - Light Trucks	13.5	14.0	14.2	13.0	13.2			
Gasoline Cost - Light Trucks	\$208,413	\$148,972	\$207,629	\$306,879	\$283,188			
Maintenance Cost - Light Trucks	\$251,269	\$205,174	\$262,038	\$390,723	\$294,869			
Maint. Cost per Mile - Light Trucks	\$0.092	\$0.104	\$0.088	\$0.126	\$0.111			
Number of Vehicles - Diesel Vehicles	6	7	13	8	13			
Miles Traveled - Diesel Vehicles	90,021	96,136	123,634	59,177	93,242			
Miles Traveled per Diesel Vehicle	15,004	13,734	9,510	7,397	7,172			
Diesel Fuel Use (GGE) - Diesel Vehicles	2,269	3,222	11,915	4,936	10,322			
Diesel Fuel Cost - Diesel Vehicles	\$2,245	\$2,953	\$10,667	\$4,770	\$11,504			
B20 Fuel Use (GGE) - Diesel Vehicles	3,360	3,920	0	0	0			
B20 Fuel Cost - Diesel Vehicles	\$13,500	\$3,100	0	0	0			
Maintenance Cost - Diesel Vehicles	\$17,952	\$3,975	\$14,183	\$4,665	\$26,770			
Maint. Cost per Mile - Diesel Vehicles	\$0.199	\$0.041	\$0.115	\$0.079	\$0.287			
Number of Gasoline Buses	8	8	7	5	6			
Number of Gasoline Truck Others	0	9	15	1	1			
Number of Exempted Vehicles	421	528	457	408	443			
CFV Acquisitions - Only New CFVs		14	32	40	24			
CFVs, AFVs and Exempted Vehicles	1,027	1,024	1,104	1,150	1,193			

	Fiscal Year							
Alternative Fuel Vehicles (AFVs)	1997	1998	1999	2000	2001			
Number of Vehicles - AFVs	12	12	7	12	14			
Miles Traveled - AFVs	26,658	61,986	20,503	88,926	25,501			
Gas Fuel Use (gallons) - AFVs	1,510	2,175	977	4,021	1,175			
Alt. Fuel Use (GGE) - AFVs	0	0	0	0	44			
Percent Alt. Fuel Use in AFVs	0	0	0	0	4%			
Alt. Fuel Cost - AFVs	0	0	0	0	\$100			
Maintenance Cost - AFVs	\$1,876	\$2,733	\$2,045	\$5,683	\$5,320			
AFV Acquisitions - Only New AFVs		0	0	2	0			
Percent AFVs of New Acquisitions		0	0	5%	0			
Number of Vehicles - CNG Vehicles								
Miles Traveled - CNG Vehicles								
Miles Traveled per CNG Vehicle								
Gas Fuel Use (gallons) - CNG Vehicles								
CNG Fuel Use (GGE) - CNG Vehicles								
CNG Fuel Cost - CNG Vehicles								
CNG Fuel Cost per GGE								
Maintenance Cost - CNG Vehicles								
Maint. Cost per Mile - CNG Vehicles								
Number of Vehicles - E85 Vehicles	12	12	7	12	14			
Miles Traveled - E85 Vehicles	26,658	61,986	20,503	88,926	25,501			
Miles Traveled per E85 Vehicle	2,222	5,166	2,929	7,411	1,822			
Gas Fuel Use (gallons) - E85 Vehicles	1,510	2,175	977	4,021	1,175			
E85 Fuel Use (GGE) - E85 Vehicles	0	0	0	0	44			
E85 Fuel Cost - E85 Vehicles	0	0	0	0	\$100			
E85 Fuel Cost per GGE	0	0	0	0	\$2.27			
Maintenance Cost - E85 Vehicles	\$1,876	\$2,733	\$2,045	\$5,683	\$5,320			
Maint. Cost per Mile - E85 Vehicles	\$0.0704	\$0.0441	\$0.0997	\$0.0639	\$0.2086			
Number of Vehicles - LPG Vehicles								
Miles Traveled - LPG Vehicles								
Miles Traveled per LPG Vehicle								
Gas Fuel Use (gallons) - LPG Vehicles								
LPG Fuel Use (GGE) - LPG Vehicles								
LPG Fuel Cost - LPG Vehicles								
LPG Fuel Cost per GGE								
Maintenance Cost - LPG Vehicles								
Maint. Cost per Mile - LPG Vehicles								

Appendix C

Planning and Reporting Compliance by Agency

Planning and Reporting Compliance by Agency

AGENCY Agency Director	Fleet Efficiency Plan Submitted (1995)	Alternative Fuel Vehicle Plan Submitted (1995)	4 th Annual Progress Report Submitted (1998)	5 th Annual Progress Report Submitted (1999)	6 th Annual Progress Report Submitted (2000)	7 th Annual Progress Report Submitted (2001)
Attorney General	✓	NR	✓	✓	✓	✓
State Auditor	✓	NR	✓	✓	✓	✓
State Treasurer	✓	NR	√	✓	✓	√
Secretary of State		NR	✓	✓	✓	✓
Office of Administration	✓	√	√	✓	✓	✓
Department of Agriculture	✓	✓	√	✓	✓	✓
Department of Conservation	✓	√	√	✓	✓	✓
Department of Corrections	✓	✓	✓	✓	✓	✓
Department of Economic Development	✓	✓	✓	✓	✓	✓
Department of Elementary and Secondary Education	1	✓	✓	✓	1	✓
Department of Health	✓	✓	✓	✓	✓	✓
Department of Higher Education (Coordinating Board For Higher Education)	(I)	NR	✓	✓	✓	✓
Central Missouri State University	✓	✓	✓	✓	✓	✓
Harris-Stowe State College	(I)	NR	√	✓	1	✓
Lincoln University	1	NR	✓	✓	✓	✓
Missouri Southern State College				✓	1	✓
Missouri Western State College	√	NR	✓	✓	1	✓
Northwest Missouri State University	(I)	✓	✓	✓	1	✓
Southeast Missouri State University			✓	✓	1	✓
Southwest Missouri State University	(I)	√	✓	1	1	✓
Truman State University	✓	✓	✓	✓	1	✓
University of Missouri	✓	✓	✓	✓	1	✓
Department of Insurance	√	NR	✓	✓	√	✓
Department of Labor & Industrial Relations	(I)	✓	✓	✓	1	1
Department of Mental Health	(I)	✓	✓	√	1	1

AGENCY Agency Director	Fleet Efficiency Plan Submitted (1995)	Alternative Fuel Vehicle Plan Submitted (1995)	4 th Annual Progress Report Submitted (1998)	5 th Annual Progress Report Submitted (1999)	6 th Annual Progress Report Submitted (2000)	7 th Annual Progress Report Submitted (2001)
Department of Natural Resources	√	>	\	>	√	✓
Department of Public Safety	✓	(I)	✓	✓	✓	1
Department of Revenue	√	✓	✓	✓	√	1
Department of Social Services	√	✓	✓	✓	√	1
Department of Transportation	(I)	(I)	✓	√	√	✓
TOTAL	20	17	29	30	30	30

Key: ✓ = submitted

(I) = submitted incomplete

--- = did not submit

NR = not required to submit

Appendix D

Vehicle Acquisitions Summary Table

Missouri State Fleet AFV Acquisitions and Percent Alternative Fuel Use Throughout FY01 and AFV Acquisitions Made During the Biennial Period of FY99 and FY00

Used vehicle acquisitions are not included in this summary table, only the acquisition of new vehicles.

	Missouri ate Agency	Alt Fuel Use in AFVs	AFV Acquisitions	AFV Acquisitions Biennial Period
		FY01	FY01	(FY99 and FY00)
Elected Of	ficials			
Attor	ney General's Office ¹			
	etary of State ¹		100%	100%
	e Auditor ¹			
State	e Treasurer ¹			
Executive	Departments			
	culture	8%	100%	26%
Cons	servation	7%	83%	30%
Corre	ections	18%	0%	21%
Econ	omic Development	4%	71%	38%
Elem	. and Secondary Education	0%	0%	92%
Heal	th	0%	0%	0%
	er Education ¹			
Insur	rance ¹		100%	
Labo	r and Industrial Relations	0%	67%	14%
Ment	al Health	1%	39%	19%
Natu	ral Resources	23%	64%	59%
Publi	c Safety	2%	0%	45%
Reve	enue	3%	100%	88%
Socia	al Services	1%	20%	24%
Trans	sportation	17%	30%	86%
Office	e of Administration	18%	50%	62%
Higher Ed	ucation			
Cent	ral Missouri State University	100%	NA^2	0%
Harri	s-Stowe State College ¹			
Linco	oln University ¹			
Miss	ouri Southern State College ¹			
Miss	ouri Western State College ¹			
North	nwest Missouri State University	0%	50%	43%
Sout	heast Missouri State University	0%	0%	0%
Sout	hwest Missouri State University	0%	0%	0%
Trum	an State University	0%	29%	11%
Unive	ersity of Missouri	4%	0%	3%

Notes

^{1.} Shown in the shaded areas, agencies that operate less than 16 vehicles are not subject to refueling or acquisition requirements described in RSMo 414.400 and 414.410.

^{2.} No acquisitions (NA) were made by the agency throughout the reporting period.

Vehicle Fuel Efficiency of Gasoline Vehicles Operated by the Missouri State Fleet Throughout FY01

Vehicle fuel efficiencies are computed from actual vehicle operating data provided by the agencies.

Missouri State Agency	Miles per Gallon	Miles per Gallon
	Passenger Cars ¹	Light Trucks ²
Elected Officials		
Attorney General's Office	NVR^3	NVR ³
Secretary of State	28.3	19.1
State Auditor	24.1	18.5
State Treasurer	Insufficient Data ⁴	12.1
Executive Departments		
Agriculture	27.1	19.5
Conservation	25.6	19.0
Corrections	16.9	11.6
Economic Development	25.1	19.2
Elem. and Secondary Education	26.3	23.2
Health	30.8	18.4
Higher Education	28.6	25.6
Insurance	26.0	NVR ³
Labor and Industrial Relations	23.4	19.8
Mental Health	23.4	15.3
Natural Resources	25.0	17.1
Public Safety	24.5	15.8
Revenue	25.6	19.7
Social Services	27.1	21.7
Transportation	24.0	11.8
Office of Administration	26.0	14.7
Higher Education		
Central Missouri State University	19.7	10.9
Harris-Stowe State College	12.5	NVR ³
Lincoln University	26.0	31.2
Missouri Southern State College	24.3	13.6
Missouri Western State College	NVR ³	10.8
Northwest Missouri State University	30.6	13.9
Southeast Missouri State University	24.4	14.6
Southwest Missouri State University	23.7	15.4
Truman State University	23.2	17.6
University of Missouri	20.0	13.2

Notes:

- 1. Passenger cars are vehicles classified as sedans and station wagons.
- 2. Light trucks are vehicles classified as pickup trucks, cargo vans, passenger vans and sport utility vehicles.
- 3. No vehicles were reported by the agency within the designated vehicle category.
- 4. Although one passenger car was reported by the Office of the State Treasurer, the vehicle was not used enough to compute vehicle fuel efficiency.

Appendix E

EPAct Credit Banking and Selling Program

Report Requirement for EPAct Credit Banking and Selling Program

Legislation passed in 2001 (Section 414.407, RSMo) charges the Department of Natural Resources with conducting a study on the use of alternative fuels in motor vehicles in the state and to report its findings to the General Assembly by January 1, 2002. This study includes the following:

- An assessment of methods that the state may use to increase use of alternative fuels in vehicle fleets, including the sale of credits generated pursuant to the federal Energy Policy Act to pay for the difference in cost between alternative fuels and conventional fuels. A discussion of recommendations is included in Appendix F.
- An analysis of the current use of alternative fuels in public and private vehicle fleets in the
 state. Information on the state fleet alternative fuel use can be found in this report.
 Additional information on biodiesel and diesel usage in selected state agencies can be found
 in this section of the report. Total alternative fuel use, for E-85, propane, compressed natural
 gas, and biodiesel in Missouri public and private vehicle fleets can be found in this section of
 the report.
- An assessment of the impact that increased use of alternative fuels may have on the state's economy and environment.

Energy Center strategies for implementation of the EPAct Credit Banking and Selling Program

The Energy Center will:

- 1) Inform state agencies of the alternative fuel vehicle "credit trading" program established by the U.S. Department of Energy.
- 2) Inform state agencies of establishment of the EPAct Credit Banking and Selling Program and its uses.
- 3) Be responsible for the development, administration and oversight of the program.
- 4) Promote state vehicle use of biodiesel and actively seek biodiesel suppliers at locations around the state.

Analysis of current use of alternative fuels in public and private vehicle fleets in Missouri.

Please see the information provided elsewhere in this report regarding use of E-85, propane, GNG and electricity in state-owned vehicles. This section outlines use of diesel and biodiesel in state-owned vehicles and alternative fuels in general in private fleets.

Since biodiesel can be used in diesel vehicles, it is important to collect information on diesel vehicles in the state fleet. This information yields a potential amount for biodiesel usage. Because the State Fleet Efficiency and Alternative Fuel Use Report compiled by the Energy

Center does not include most vehicles over 8500 GVWR, a significant amount of diesel vehicle and consumption data has not been included in prior annual reports. Recently, the Energy Center contacted four agencies maintaining large diesel fleets and collected the following information on their diesel vehicles:

Department of Conservation – 304 diesel units; 256,227 gallons diesel consumed annually; located throughout 11 districts statewide.

Department of Corrections – 160,987 gallons diesel consumed annually

Department of Transportation – 4,973 diesel units statewide; 6,289,999 gallons diesel consumed statewide during fiscal year 2001; District 6 in St. Louis consumed 444,807 gallons of diesel during fiscal year 2001

Department of Natural Resources – The Division of State Parks provided the following information for calendar year 2000:

- 1) Licensed diesel vehicles; 40 units, consuming a total of 36,348 gallons of diesel fuel. These vehicles are scattered statewide.
- 2) Unlicensed diesel powered units; 247 units, consuming 43,976 gallons of diesel fuel. This equipment is scattered across the state.

The Missouri Soybean Association has estimated 500,000 gallons of B100 (100% biologically-derived fuel) use in Missouri during the past year. Missouri companies with biodiesel programs include Kansas City Power and Light, Kansas City Water Services, Bi-State Development Agency, Missouri Department of Transportation, Missouri Department of Natural Resources, Northwest Missouri State University, Gray Eagle Distributors and Ft. Leonard Wood. (Information provided courtesy of the National Biodiesel Board)

Three agencies have informed the Energy Center that they recently began using biodiesel in some parts of their fleet: the Department of Transportation, Northwest Missouri State University and Department of Natural Resources.

The Department of Transportation has been using a 20% blend of biodiesel since the winter of 2001 in the entire St. Louis District six diesel fleet (over 900 diesel vehicles). They have used over 50,000 gallons of B-100.

The Department of Natural Resources' Division of State Parks has been using a 20% blend of biodiesel since last fall:

Eastern Parks District, Festus: They have been using biodiesel since September. They have been bidding winter blend for highway use so it can be used in all equipment and vehicles. They have purchased a total of 1,500 gallons and as of the end of November have used 628.30 gallons. The fuel has been used both at the district and by the construction crews that work out of that district office. A wide variety of equipment and vehicles have used the biodiesel fuel - fork lift, tractor,

front loader, 1-ton trucks, dump trucks, roll off truck, front deck mower, bulldozers and backhoes.

Robertsville State Park: One tank (200 gallons) of biodiesel fuel was purchased in September, 2001.

E-85

E-85 sales at two Jefferson City locations:

Convenient Food Mart - Truman Boulevard

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11/1/97 to 10/31/98 3,131 gallons
11/1/98 to 10/31/99 14,326 gallons
11/1/99 to 10/31/00 19,166 gallons
11/1/00 to 10/31/01 24,299 gallons
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Convenient Food Mart - Eastland

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11/1/97 to 10/31/98 1,501 gallons
11/1/98 to 10/31/99 8,973 gallons
11/1/99 to 10/31/00 13,256 gallons
11/1/01 to 10/31/01 19,784 gallons
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E-85 sales at Ceruti Citgo – Ballwin, MO

2000 to present – 2673 gallons (Information provided courtesy of station owner.)

E-85 sales at Phillips 66 – St. Louis

The station manager reported that E-85 sales average from 450 – 500 gallons monthly.

E-85 sales at Presto – Kansas City

The station manager reported that E-85 sales average 420 gallons monthly.

- 3) Compressed Natural Gas 600,000 Gasoline Gallon Equivalents consumed annually in the St. Louis metropolitan area. This area has the only public refueling station in Missouri. (Information provided courtesy of LaClede Gas)
- 4) Propane- The 2000 API report, issued November 2001, shows Missouri propane use for "internal combustion fuel" was 12,841,000 gallons in 2000, nearly double the 1999 reported rate of 6,795,000. (Information provided courtesy of the Missouri Propane Gas Association)

Assessment of the impact that increased use of alternative fuels may have on the state's economy and environment.

The U.S. Department of Energy classifies the following fuels as "alternatives" to gasoline: biodiesel, electric fuel, ethanol, hydrogen, methanol, natural gas, propane, p-series, and solar fuel. Only biodiesel, electric, ethanol, natural gas, and propane technologies are currently used in Missouri. Methanol is not discussed in this report, but comments are included on p-series, hydrogen and solar applications.

Overall Impact

The U.S. in general and Missouri in particular depend heavily on petroleum imports. One of the strategies for reducing this dependence is to produce vehicles that run on alternatives to gasoline and diesel fuel. These alternatives include alcohols, gaseous fuels, renewable fuels, electricity, and fuels derived from coal. The push to develop alternative fuels is driven by energy security and environmental concerns. Many alternative fuels reduce emissions of toxic chemicals, ozone-forming compounds, and other pollutants, as well as greenhouse gases.

The key drawback of alternative fuels has been that because of higher fuel and/or vehicle prices, the cost to own alternative fuel vehicles (AFVs) has been generally higher than for conventional vehicles. And while most AFVs have superior environmental performance compared to conventional vehicles, their performance in terms of range, cargo capacity, and ease of fueling does not compare favorably with conventional vehicles. Furthermore, because there is little fueling infrastructure (as compared to gasoline and diesel fuel), fueling an AFV can be inconvenient.

Environmental Impacts

Biodiesel

Biodiesel has physical properties very similar to conventional diesel. It has improved lubricity and impacts other fuel characteristics that may impact performance/emissions. Biodiesel is better for marine engine applications, particularly two-stroke engines, where a portion of the fuel is dumped into the water body unburned (inefficient engine design of two-stroke engines). Emission properties, however, are in general better for biodiesel than for conventional diesel. The use of biodiesel (B20 or higher concentrations) leads to substantial reductions in emissions of unburned hydrocarbons, carbon monoxide, and particulate matter.

Using biodiesel in a conventional diesel engine substantially reduces emissions of unburned hydrocarbons, carbon monoxide, sulfates, polycyclic aromatic hydrocarbons, nitrated polycyclic aromatic hydrocarbons, and particulate matter. New generation catalysts are more sensitive to poisoning by (fuel) sulfur content. These reductions increase as the amount of biodiesel blended into diesel fuel increases. The greatest reductions are seen with B100.

The use of biodiesel decreases the solid carbon fraction of particulate matter (since the oxygen in biodiesel enables more complete combustion to CO2) and reduces the sulfate fraction (biodiesel

contains less than 24 ppm sulfur), while the soluble, or hydrocarbon, fraction stays the same or increases. Therefore, biodiesel works well with new technologies such as catalysts (which reduce the soluble fraction of diesel particulate but not the solid carbon fraction), particulate traps, and exhaust gas recirculation.

The effects of biodiesel use on emissions of nitrogen oxides (NOx) are not as clear. Several studies have indicated that NOx emissions increase with the concentration of biodiesel in the fuel.

A 1998 amendment to EPAct granted credits to owners of covered fleets who purchase biodiesel. The biodiesel purchase credits count toward the purchase requirements for alternative fuel vehicles. Every 450 gallons of biodiesel (B100) purchased earns one credit. This allows fleet owners to meet their EPAct requirements without purchasing new vehicles and without modifying their existing fueling infrastructure. Some environmentalists have charged that because the fuel is then blended at the 20 percent level, there is little impact on oil consumption or vehicle emissions.

Ethanol

The Clean Air Act Amendments of 1990 mandated the sale of oxygenated fuels in areas with unhealthy levels of carbon monoxide. Since that time, there has been strong demand for ethanol as an oxygenate blended with gasoline. In the United States each year, more than 1.5 billion gallons are added to gasoline to improve the emissions quality of gasoline.

Typically, ethanol is blended with gasoline to form an E-10 blend (10 percent ethanol and 90 percent gasoline), but it can be used in higher concentrations such as E-85 or in its pure form. EPA recognizes E-85 as an alternative fuel. E-85 is more common than E-100 (pure ethanol) because the 15 percent gasoline content in E-85 allows for easier ignition under cold-start conditions. Ethanol-gasoline blends with higher ethanol content (E85, for example) need special engines to operate properly. EPA does not recognize E-10 as an alternative fuel because its widespread use does not significantly diminish gasoline consumption. Ethanol use allows for more complete combustion to carbon dioxide.

Ethanol-powered vehicles have some environmental disadvantages compared to gasoline vehicles such as a tendency to emit more formaldehyde and acetaldehyde. However, these emissions can be largely controlled and they are more than offset by ethanol's emissions advantages. Ethanol-powered vehicles have fewer ozone-forming emissions than similar gasoline-powered vehicles, as well as significant reductions in carbon monoxide emissions. In addition, ethanol has a much lower content of toxic compounds such as benzene and toluene, leading to lower emissions of most toxic compounds.

Although E85 FFVs can run on E85, conventional gasoline or any blend of ethanol and gasoline in between, FFV performance (both mechanical and emissions-related) is best when the vehicle is run on the fuel for which it is optimized. Since FFVs can be optimized to run on conventional

gasoline or E85, FFVs should be mechanically adjusted for performance optimization based on the fuel primarily used.

Natural Gas

Natural gas is a mixture of hydrocarbons - mainly methane (CH₄) - and is produced either from gas wells or in conjunction with crude oil production. The interest for natural gas as an alternative fuel stems mainly from its clean burning qualities, its domestic resource base, and its commercial availability to end-users. Because of the gaseous nature of this fuel, it must be stored onboard a vehicle in either a compressed gaseous state (CNG) or in a liquefied state (LNG).

Compared with gasoline-powered vehicles, dedicated natural gas vehicles can reduce exhaust emissions of CO by approximately 70 percent, non-methane organic gas (NMOG) by 89 percent and NOx by 87 percent. Dedicated natural gas vehicles also can reduce carbon dioxide (CO₂) -- the principle "greenhouse" gas - exhaust emissions by 20-30 percent.

Natural gas vehicles produce a tiny fraction of the evaporative, running loss, and refueling hydrocarbon emissions. In addition, natural gas vehicles emit virtually no particulate matter, which has been known to harm the human respiratory and cardiovascular systems and cause "haze," or visibility impairment.

Propane (LPG)

Liquefied petroleum gas (LPG) consists mainly of propane, propylene, butane, and butylene in various mixtures. However, for all fuels in the United States, the mixture is mainly propane. It is produced as a by-product of natural gas processing and petroleum refining. The components of LPG are gases at normal temperatures and pressures. Most of the LPG used in the United States is produced domestically.

Tests conducted by the U.S. Environmental Protection Agency show that propane vehicles can produce 30 percent to 90 percent less carbon monoxide and about 50 percent fewer toxics and other smog-producing emissions than gasoline engines.

Economic Impacts

Biodiesel

Biodiesel fuel can be made from vegetable oils and animal fats, which are non-toxic, biodegradable, renewable resources. Fats and oils are chemically reacted with an alcohol (methanol is the usual choice) to produce chemical compounds known as fatty acid methyl esters. Biodiesel is the name given to these esters when they're intended for use as fuel. Glycerol (used in pharmaceuticals and cosmetics, among other markets) is produced as a co-product.

Approximately 55 percent of the biodiesel industry uses any fat or oil feedstock, including recycled cooking grease. The other half of the industry is limited to vegetable oils, the least expensive of which is soy oil.

The price of biodiesel has historically been higher than the price of conventional petroleum-based diesel fuel. The wholesale price for conventional diesel has averaged between \$0.70 and \$1.05 per gallon since January 2000; the average spot price for conventional diesel in September 2001 was about 75 cents. The current wholesale price for biodiesel ranges between \$1.33 and \$1.73 per gallon for biodiesel made from recycled oil, and between \$1.94 and \$2.26 for biodiesel made from virgin soy. A key cost advantage of biodiesel relative to some other alternative fuels is the ability to use it in existing diesel vehicles with little or no modification.

Feedstock costs account for a large percent of the direct production costs of biodiesel, including capital cost and return. It takes about 7.3 pounds of soybean oil, which costs about 20 cents per pound, to produce a gallon of biodiesel. Feedstock costs alone, therefore, are at least \$1.50 per gallon of soy biodiesel. Fats and greases cost less and produce less expensive biodiesel, sometimes as low as \$1.00 per gallon. The quality of the fuel is similar to soy biodiesel fuel, and sophisticated feedstock blending strategies will begin to address consumer requests for low NOx fuels in the summer and good cold flow fuels in the winter.

Current domestic production of biodiesel is between 30 and 60 million gallons per year. Supply of biodiesel involves purchase contracts by fleet owners and delivery of biodiesel to fleet-owned dispensing sites.

According to the American Biofuels Association, with government incentives comparable to those provided for ethanol, biodiesel sales could reach about 2 billion gallons per year, or about 8 percent of highway diesel consumption. At this level of market penetration, biodiesel would probably be used in bus fleets and heavy-duty trucks (primarily in blends with fossil diesel at the 20 percent level), marine vessels such as ferries, construction and agricultural vehicles, home heating oil systems and electric generation. Small quantities of biodiesel in low-sulfur diesel fuels could be used to offset the removal of sulfur (sulfur lubricates diesel fuel engine components).

An economic study recently released by the U.S. Department of Agriculture (USDA) says that increased demand for soy-based biodiesel would result in "significant economic benefits to U.S. farmers". The study, entitled "Economic Analysis of Increasing Soybean Oil Demand Through the Development of New Products," was completed by the USDA's Office of Energy Policy and New Uses in conjunction with the Economic Research Service (ERS). Economists examined the effect of increasing soybean oil demand from 183 million pounds in 2001 to 2.9 billion pounds in 2010 (an average of 1.5 billion pounds per year), the equivalent of 200 million gallons of biodiesel production a year. The U.S. used about 35 billion gallons of on-road diesel fuel in 1999.

According to the study's projections, an increase in soybean oil demand averaging 1.5 billion pounds per year would increase the annual average soybean oil price by 22 percent. An increase of 200 million gallons in annual soybean oil demand would boost total crop cash receipts by \$5.2 billion cumulatively by 2010, resulting in an average net farm income increase of \$300 million per year. The price for a bushel of soybeans would rise by an average of 17 cents annually during

the ten-year period. The study also projects that the average annual increase in use of soybean oil would create 13,000 jobs in the farm, food processing, and manufacturing and service sectors.

Among the projected macroeconomic effects were a reduction in the nation's dependence on imported energy and a decrease in the U.S. trade deficit. The net export value of agricultural commodities plus the decline in import value of diesel fuel would lower the trade deficit by a cumulative \$1.55 billion during 2001-2010. (Source: press release, National Biodiesel Board)

Ethanol

Consumption of E-85 – which is recognized by EPAct – is relatively low. In 1999, 2.5 million gasoline equivalent gallons of E-85 were consumed nationally, although consumption has steadily increased since 1992. The existing national vehicle fleet includes a large number of Flexible Fuel Vehicles (FFV) that could support a much higher amount of E-85 consumption. The Ford Ranger and Ford Taurus now have E-85/gasoline flexible fuel capability standard; other vehicles with the option of FFV capability include the Dodge Caravan, Chevrolet S-10 pickup, and Mazda B3000 pickup. Approximately 126,000 of these vehicles were sold in 1998 and 290,000 in 1999.

The primary barrier to E-85 consumption is price. The February 2002 pump price of E-85 in Missouri has about \$1.26 per gallon compared to about \$1.04 for gasoline. The pricing difference is compounded by the difference in energy content. The energy content of a gallon of gasoline is about 1.4 times the energy content of a gallon of E-85.

In August 2001, the California Energy Commission published results of a study indicating ethanol industry is undergoing major expansion. The survey of 84 ethanol companies, mostly located in the Midwest, said that the industry's present production capacity of 2.2 billion gallons will double in four years. Capacity is planned to grow to 3 billion gallons by the end of 2002; 4 billion gallons by the end of 2003; 4.2 billions gallons by the end of 2004; and 4.4 billion gallons by the end of 2005. Of the 84 companies surveyed, 44 are currently producing ethanol at 57 facilities responsible for the current annual production capacity of 2.2 billion gallons.

The increase in ethanol production is due to the expansion of existing plants and new plants that will begin coming on line this year. According to the survey, 13 new plants were under construction and 33 additional new plants were in the planning stages.

Dr. Van Dyne, retired Research Associate Professor of the University of Missouri-Columbia, completed a statewide study to determine employment and economic benefits of ethanol fuel production in Missouri. According to Dr. Van Dyne, "The two ethanol plants in north Missouri have added significant direct benefits to Missouri, with the Macon plant adding almost \$14 million and the Craig plant adding slightly over \$10 million this past year. The direct and indirect impacts of the two plants, each producing 22 million gallons of ethanol annually, have major positive impacts on the north Missouri economies, including: process and add value to almost 16 million bushels of corn annually, 1,815 additional jobs, \$172.8 million increase in total output, and tax revenues of \$17.7 million."

Sam Creed, Missouri Corn Merchandising Council Chairman and farmer from Fairfax, MO. "According to the Van Dyne study, the total direct benefits of the Northeast Missouri Grain plant represents an increase of about \$0.50 per bushel for all of the 27.8 million bushels of corn produced in the 9-county region surrounding the plant. The total benefits of the Golden Triangle Energy plant is an increase of about \$0.23 per bushel for each of the 44 million bushels of corn produced in the 4-county region of northwest Missouri. It was obviously a good use of corn check-off dollars to support the development of the two plants in the mid-1990s."

"We also asked Dr. Van Dyne to analyze the potential impacts if the industry grows to five plants of 40 million gallons, as recommended in an earlier independent analysis for our organizations," explains Gary Marshall, MCGA and MCMC CEO. "The Van Dyne study documents that with five ethanol plants the estimated direct and indirect impacts include the creation of 8,890 new jobs, \$845 million increase in total output and over \$87 million in new federal and state tax revenues annually. This study documents a nearly \$1 billion total impact and what some of us in the industry have believed all along – that ethanol can cause a renewal in agriculture and rural Missouri and benefit the entire state economy."

Jeff Kapell of SJH and Company summarizes, "Based on careful and in-depth analysis, we know that Missouri can reasonably support approximately 150 million gallons of ethanol production with current market conditions. This number is based primarily on domestic corn supply and corn available at a reasonable price, as well as other numerous market factors. It is possible that federal legislation could mean that Missouri can support up to 250 million gallons of ethanol production in the future. Approximately five, 30 to 50 million gallon facilities could supply this demand and would likely be located in the five major growing regions of the state: northwest, northeast, west-central, east-central and southeast Missouri."

"The Missouri ethanol demand is currently approximately 60 million gallons. SJH finds that the ethanol market can be expected to grow in the mid- to long-term to approximately 80 million gallons, considering current market drivers. An accepted rule of thumb in business is that 30 to 50 percent of a facilities' production should be used in a 'local' market. Thus, if Missouri ethanol demand is 80 million gallons, then Missouri production should be approximately 160 to 240 million gallons to meet such demand. Again, the case is built for approximately five, 30 to 50 million gallon ethanol production facilities."

Beginning late September 2001, several large petroleum companies that provide gasoline to the St. Louis area substituted ethanol-based winter grade gasoline for summer grade gasoline blended fuels using methyl-tertiary butyl ether (MTBE) as an oxygenate.

Most of the current infrastructure for the delivery of ethanol is in the form of tanker trucks used to deliver ethanol to terminals for blending with gasoline. In addition, there were 95 E-85 refueling sites nationally as of November 16, 2000, mostly in the Midwest, where ethanol is produced. Since there is experience in storing and delivering ethanol, and since the fueling systems are similar to gasoline, the refueling infrastructure could expand to meet increased demand if the delivery costs were reduced.

At present, most U.S. ethanol is produced from corn. Ethanol can also be produced from other cellulosic biomass resources such as forest materials, agricultural residues and urban wastes.

Ethanol production is a no-waste process that adds value to the feedstock by converting it into more valuable products. A number of co-products are created during ethanol production. The two main co-products are CO_2 and distillers grain. Many ethanol plants collect the CO_2 , clean it of any residual alcohol, compress it, and sell it for use in carbonate beverages or to flash freeze meat. Wet and dried distillers grains are high in protein and other nutrients and are valued livestock feed ingredients. Some ethanol plants also create a "syrup" that can be sold in addition to, or combined with, the distillers grain.

Natural Gas

Most natural gas consumed in the United States is domestically produced. Natural gas is distributed throughout the United States in extensive pipeline systems that extend from the wellhead to the end user. Every continental state has access to natural gas through pipelines. The pipeline system consists of long-distance transmission systems, followed by local distribution systems. Some underground storage is also used to help supply seasonal peak needs.

Costs for a "slow fill" system or "quick fill" system to handle public or private fleets can range from as little as \$250,000 to as much as \$3 million for a bus fleet. A compressor station typically costs \$2,000 to \$4,000 per vehicle served. Refueling can be done easily by trained drivers.

Costs

- Fuel cost is less than that of gasoline, per gasoline gallon equivalent; local utility rates vary.
- Conversion costs about \$2,000 to \$3,000 per vehicle. The auto manufacturer's price premium can be \$1500 to \$6,000.
- Incremental cost premiums for CNG heavy-duty trucks and transit buses is in the range of \$30,000 to \$50,000.
- Federal and other incentives can help defray some of the increase in vehicle acquisition costs.
- Fleets may need to purchase service and diagnostic equipment if access to commercial CNG/LNG vehicle maintenance facilities is not available.

Propane (LPG)

Nationally, more than 350,000 vehicles, mostly in fleets, are powered by propane. Propane is powering taxis in Las Vegas; school buses in Kansas City and Portland, Oregon; sheriff and police cars in other communities; and in dozens of fleets around California. Propane is used in both light- and medium-duty vehicles. Propane has been used as a transportation fuel around the world for more than 60 years.

Costs

- Propane costs in fleets typically range from 5 percent to 30 percent less than those of gasoline.
- Fueling station cost is similar to, or lower than, that for a comparably sized gasoline dispensing system.

- Service and diagnostic equipment may be required if access to commercial propane vehicle maintenance facilities is not available.
- Factory-installed light-duty truck conversion costs about \$2,500 over the conventional vehicle base price; non-factory conversions also average about \$2,500.

Electric Vehicles, Hydrogen and Solar

Electricity used to power vehicles is commonly provided by batteries. Various types of batteries are being tested for use in electric vehicles (EVs). Some of the technologies being used or evaluated include lead-acid, nickel cadmium, nickel iron, nickel zinc, nickel metal hydride, sodium nickel chloride, zinc bromine, sodium sulfur, lithium, zinc air and aluminum air. EVs produce no tailpipe emissions. However, in most battery-powered EVs the ultimate source of electricity stored in batteries is the existing grid based on centralized power plants whose output is transmitted to substations through high voltage transmission systems, stepped down to lower voltages, and carried to homes and businesses through distribution systems. Thus, the use of EVs can add to NOx, SO2, CO₂ and mercury emissions from power plants.

EVs, whether "pure" or hybrid, have a relatively high initial capital cost. However, the cost of an equivalent amount of electric fuel for EVs is less than the price of gasoline. Maintenance costs for pure EVs tend to be lower than for conventional vehicles because EVs have fewer moving parts to service and replace.

Hydrogen gas (H₂) is being explored for use in combustion engines and fuel-cell electric vehicles. Hydrogen is renewable and supply is virtually unlimited. The ability to create the fuel from a variety of resources and its clean-burning properties make it a desirable alternative fuel.

Converting to a hydrogen-based economy would require major infrastructure investment. While pipeline transportation is generally the most economic means of transporting gaseous fuels, a pipeline system for hydrogen is currently not in place. Transportation of hydrogen is typically in canisters and tanker trucks.

On the other hand, a conversion to a hydrogen-based economy would create thousands of permanent scientific and industrial jobs. Building plants, manufacturing parts, selling equipment, and developing technology would all be U.S. investments that stimulate U.S. jobs and growth.

Solar (photovoltaic) powered vehicles are very attractive from the viewpoint of energy independence and environmental protection - pure solar energy is 100% renewable and a vehicle run on this fuel would have no tailpipe emissions. However, the possibility of operating a future conventional vehicle on solar power alone is slim. Solar power may be used to run certain auxiliary systems in the vehicle or as a supplementary source of power.

Note on P-series (a biomass fuel)

P-Series is a new fuel that DOE now classifies as an alternative fuel which state government fleets may include in meeting the requirement to acquire an annually increasing percentage of alternative fuel vehicles. Pure Energy Corporation holds the exclusive worldwide license to manufacture and distribute the P-series fuels, which were developed by Dr. Stephen Paul of Princeton University. Pure Energy Corporation's P-series fuels are blends of ethanol, methyltetrahydrofuran (MTHF), and pentanes plus, with butane added for blends that would be used in severe cold-weather conditions to meet cold start requirements. It is anticipated that both the ethanol and the MTHF will be derived from renewable resources, such as waste cellulosic biomass that can be derived from waste paper, agricultural waste and urban/industrial wood waste. Pure Energy Corporation plans to use pentanes plus that are derived from the processing and production of natural gas.

Appendix F

Program Barriers and Recommendations

Program Barriers

- Because many fleet operations decisions are made by the agencies, most state agencies have developed different data tracking methods for the reporting of agency fleet operations and vehicle acquisitions data. In some cases, some of the annual reporting parameters requested for this report are not tracked by the agencies; therefore, estimated values must be prepared for the missing parameters to comply with annual reporting requirements.
- The limitations of public transportation, including scheduling and lack of local transportation in metropolitan areas, often inhibit this means for conducting state business as an effective way of reducing state fleet fuel consumption.
- In some cases, the Office of Administration does not receive any bids for certain vehicle classes that are CAFE compliant. If an agency feels a vehicle from a more fuel-efficient class cannot meet their needs, the agency submits a waiver request to acquire less efficient vehicles. (USEPA publishes the CAFE figures, which can be found at their internet site. The published CAFE figures should not be confused with those figures published in the Fuel Economy Guide or on the actual vehicle sticker.)
- Alternative fuel vehicles have not been available from manufacturers in the types and quantities as originally anticipated.
- The statutory limitations on the incremental cost differential may still prevent the procurement of some types of alternative fuel vehicles. For example, many CNG vehicles still exceed the allowable 17 % incremental cost cap in the two metropolitan areas.
- Lack of adequate refueling infrastructure, especially for CNG and E-85, has slowed progress in the use of alternative fuels. Only one CNG station in St. Louis and five public E-85 stations in three cities are currently available for refueling. Convenience and driving distance to public stations remain barriers.

Program Recommendations

The following recommendations are based primarily on guidance provided within Missouri Revised Statute, Sections 414.400 - 414.417, and the annual reports submitted by the agencies to the Energy Center.

The Missouri Revised Statute, Section 414.400, sets the minimum annual fuel requirement for AFVs of 30 percent alternative fuel by July 1, 2001. The Energy Center continues to encourage the agencies to promote the use of alternative fuel as a replacement for traditional vehicle fuels when alternative fuels are available. The statute sets the requirement for annual alternative fuel vehicle acquisitions to 50 percent of all eligible vehicles and the Energy Center continues to encourage the agencies to comply with alternative fuel vehicle acquisition requirements.

- To promote alternative fuel use, state staff who commute frequently in state vehicles may require training on the operation of alternative fuel vehicles, tracking of alternative fuel use and refueling with alternative fuels. Qualified staff at the Energy Center are available to provide alternative fuel issues training as requested by the agencies.
- Following the end of the fiscal year, the Energy Center requests that fleet operations data on vehicle operations and exempted vehicles (Worksheets1, 2, and 3) be submitted by the agencies on or before the first day of September.
- The Energy Center requests that agencies upgrade their vehicle tracking systems to include the following operations parameters for each eligible vehicle: vehicle location, number of cylinders, type of fuel used, annual quantity of each fuel used, annual fuel cost for each fuel, annual miles traveled and annual maintenance cost. It is requested that agencies upgrade their vehicle tracking systems to include the following acquisitions data for each vehicle acquired throughout the reporting period: vehicle location, vehicle make, vehicle model, number of cylinders, type(s) of fuel used, date acquired and acquisition cost. It is requested that vehicle tracking systems be upgraded to include the following exempt vehicle data for each exempt vehicle: annual gasoline cost, annual diesel cost, annual maintenance cost, annual gasoline consumption, annual diesel fuel consumption and reason for exemption. Reporting worksheets are currently being revised by the Energy Center and will be made available to agencies when completed.
- To maximize alternative fuel usage in alternative fuel vehicles, the Energy Center encourages agencies to base alternative fuel vehicles at agency locations that are geographically closest to refueling locations selling the alternative fuel used. One mechanism to assist in this process would be for agencies to create a map of their fleet locations with alternative fuel vehicles.
- The Energy Center also encourages the administrative staff of all agencies to promote, encourage and support the refueling of agency alternative fuel vehicles with the designated alternative fuel whenever agency staff drive and refuel these vehicles.